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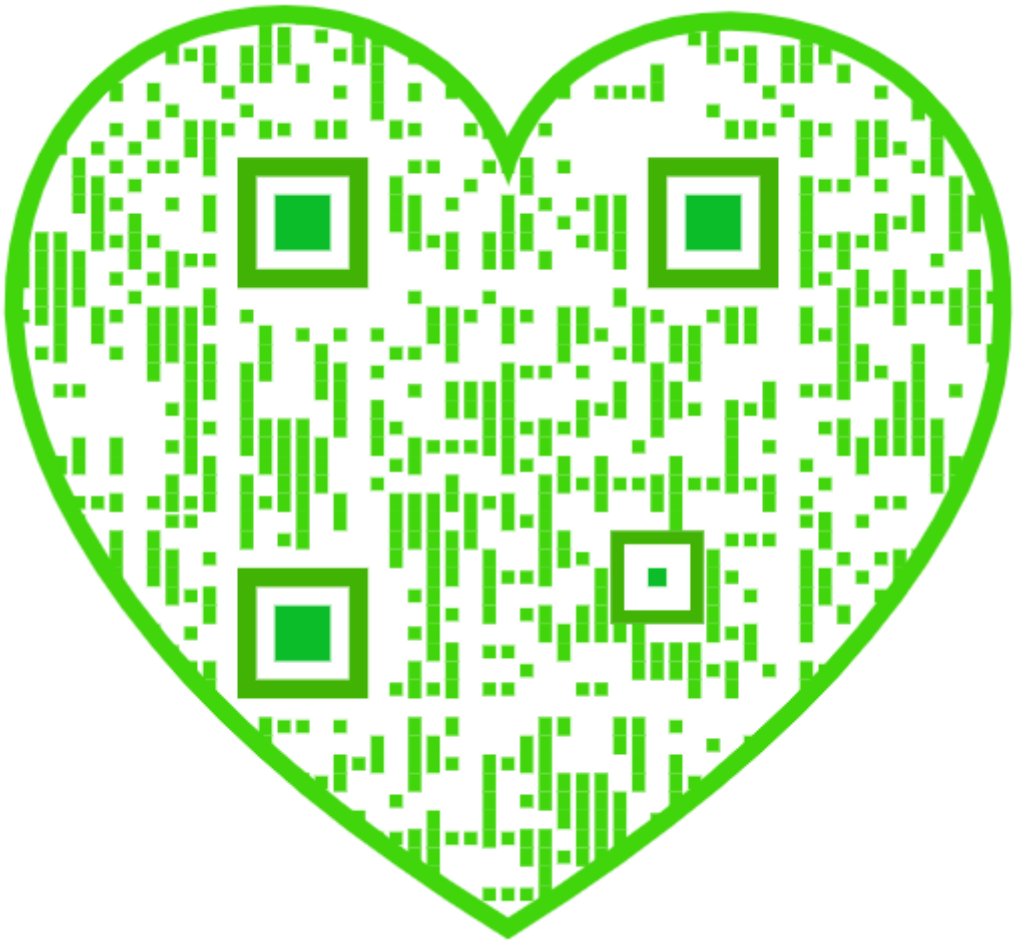
RABBIT CULTURE AND STANDARD

A COMPLETE AND OFFICIAL STANDARD
OF ALL THE RABBITS

BY
W. F. ROHE, M. D.
AND
CHARLES L. CORNMAN



Rabbit Culture and Standard

A Complete and Official Standard of All the Rabbits

BY
W. F. ROTH, M. D.
AND
CHARLES T. CORNMAN

This book has been adopted by the National Pet Stock Association of America and the New Zealand Red Hare Club of America, as their official Standard.

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Foreword

DR. W. F. ROTH DIED September 3rd, 1911. At the time of his death he was under contract with the Poultry Item, of Sellersville, Pa. to write a brochure on rabbits. The manuscript in an unfinished condition passed into our hands after his demise. The fact that Dr. Roth was not permitted to finish this work is one deeply to be regretted. He stood out as the greatest authority on this subject the United States has yet produced. It was his desire to erect this as a monument that would stand the test of time, but we have here another illustration of how man proposes and God disposes.

In taking up the completion of this work I do so with fear and trembling, appreciating the difficulty in attempting to carry out the great work outlined by him. All a man can do in this world is to do the best he can and it is my desire that I detract not one jot nor tittle from the work.

The intent of this brochure is to present the Rabbit as a Fancy, and an industry of utility value. More especially in the interest of the Belgian hare, than any of the other varieties. This means its successful breeding for profitable and useful purposes as a fancy and for food. To do this is not an easy effort at this time, owing to a serious blow the hare as a then possible industry received some years since.

It was not, however, any fault of the hare that the "boom" fell flat; but it was the fault of a false understanding of a venture of this sort by a "syndicate" of indiscreet, if not dishonest, promoters. The country was not yet ripe for the recognition by rush methods of an industry both new and foreign; and if anything, the hasty, vivid, and glaring claims were too palpably overwrought for intelligent absorption by a large and other wise preoccupied community. America was too long and wide of expanse, with too well supplied a market of all foods which were then yet too honestly placed on the consumer's table, for him to realize that the hare was an actual necessity. In fact, he didn't need it. If he desired "rabbit," which was heretofore considered more a game than domestic food, the woods, fields and prairies were full of it. But things are different now. In the last decade the wild animal has become decidedly scarce; poultry is kept at a continual advance and almost prohibitive price, and the trusts manipulating other food stuffs have made numerous products very close to a luxury, notably the meats. Nor is our population decreasing among any class except the "400," and food we must have. The necessity for food at more reasonable prices becomes more apparent every day by reason of the present prices being entirely inconsistent with the wage of the moderate working class—that class which needs most at all times. This necessity has even forced itself vaguely upon the dim vision of our mud-

dled politicians occupying the State Legislative chairs to the extent that the 1907 Legislature of Pennsylvania enacted a law permitting the trading in slaughtered Belgians on the same footing as fowls in the open market the year round. We should all be grateful for this act, for it is largely a recognition of a meat for public consumption that has hitherto been considered more game than domestic. It places the rearing of Belgians as an industry and fancy on the same footing as that of fowls, and what is now before the breeder is the exercise of wisdom, prudence, and judicious methods essential to the education of a consuming public to the value of this new meat

DR. W. F. ROTH

as a reasonably priced food. Nor should this be specially difficult, since the meat of the hare is unquestionably the most dainty and most nutritious of all meats. As an animal, the Belgian hare is the cleanest and most prolific of all animals used for food, and weight for weight, it costs less to produce five pounds of meat than any other.

In France, Belgium, and to a great extent in England and Germany, the hare is largely the meat food of the peasant population, owing not only to the delicacy and nutritious value of the flesh, but for its economic production.

The people of some foreign countries have passed through sad experiences relative to their meat supply, and while we in big America do not anticipate grave seriousness that our supply will run out, it is withal a serious issue with the poor classes in our large cities to an extent involving millions. The daily papers publish thrilling stories in almost every issue of instances where suffering for lack of food, and meat in particular, are causes of suicide, sickness, and even riots. Only the past summer uprisings by the poor were held from grave results by the Government making itself indirectly responsible for bringing about a reduction in the rate, so inordinately placed by the beef trust, which controlled almost every pound of beef and pork handled in city trade.

I cannot say how the essentials for living are manipulated in foreign countries—whether trusts or syndicates exist to make prices as they please—but if things do not

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change here by some authority more powerful than the moneyed monopolizers of the commodities of life, we need not go among the poor of foreign nations to find scarcity of food. As a people we are no better than our foreign brethren. We may be richer—at the present time—but if we keep on wasting things by inordinate living, misguided economy, and without thought for next week or next month, we are very liable one morning to wake up hungry.

Furthermore, statistics inform us that millions of poor people throughout all civilized countries can afford to eat meat no oftener than once a week, and many none the

year round. Why this should be so I cannot understand. I do know, though, that the environments of the working classes in the cities are daily becoming more impossible in the way of securing food, and our country of large, free, and abundant America is not by any means so secure within itself as to be immune from possible visitations of disaster in many forms affecting the food supply. Once a nation tolerates its business integrity to become so corrupt that business men obstruct food from reaching a distributing market in order to sustain an inordinate high price over the pretext of scarcity, and allow that food (meat and vegetables) to rot, while people are in want and starving, it is not without the bounds of reason to suppose that such flagrant injustice will go unpunished by the God of Nations. It is a question whether the densest heathen in any section of the world would pursue such tactics to punish an enemy.

These remarks are not inapropos to my subject under consideration, from the fact that the opportunities at hand in the rearing of hares make it possible to offset much of the injustice endured by those who need meat and can't afford or secure it; for these little useful, and delicate morsels of flesh can be reared in most any vacant space from a corner on the farm to a four by eight back yard or cellar of a town house. The hare is thus utilized by the peasant and poorer classes in foreign countries, and there is no reason why it should not be so utilized in this country, and made a staple food in the same basis as beef, fowl and fish.

Why all these arguments should be necessary in behalf of an industry that merits the closest recognition without them, is indeed strange when considered from any point of view—for instance; during the open season for "cotton tails" thousands upon thousands are killed by all manner of disagreeable and unsanitary means; placed on market, and sold at prices twice the actual value of meat per pound, considered even as a delicacy. Why not a far more desirable, cleanly, more readily obtainable at all times, more nutritious, and cheaper meat produced by the Belgian? Observe the menu cards of hotels, restaurants, and other resorts of the epicure, and note lobsters, crab, turtle, and a dozen other disgusting and indigestible things prepared a la mode at fancy prices; sirloin—60 cents; lamb —80 cents; veal—40 cents; eggs—two for a quarter, and so on through the list—none better, so clean, so digestible, more dainty, or so cheap as the unapproachable loin of a seasonably prepared hare. Why is this superb meat overlooked, or shall I say, neglected, for no reason whatever. I am sure once an intelligent acquaintance is had with it through the medium of judicious culinary experiment, it will become as staple as all the other meats, and the rearing of Belgian hares will be an industry of necessity.

CHARLES T. CORNMAN.

Rabbit Culture and Standard

BY

W. F. ROTH, M. D. and CHAS. T. CORNMAN

The Fancy

Breeding domestic rabbits is accomplished for two purposes—that of Fancy, and Utility. For Fancy, implies breeding to requirements that have been formulated in accord with certain ideals, termed Standard; for Utility, means rearing them for market meat, and whatever commercial use can be made out of the fur and skin. I will refer to each separately.

Careful search has failed to identify the term **Fancy** with that of rearing animals, nor that of **fancier**, unless a "cant name for sporting characters" can be so construed. The definition of the word **Fancy** is "to imagine;" to "form in one's mind an ideal of a thing "which appeals to one's liking." Another definition is "the faculty by which the mind forms images or representations of things at pleasure;" and still another "taste, conception." Last and perhaps as near correct as any, makes it imply **to like, to be pleased with, particularly on account of external appearances.**

These definitions, it seems to me, are singularly applicable to the pact of folk who make it their object to rear animate creatures so they conform with certain preconceived ideals whose chief points are beauty, grace, usefulness, and harmonious blending of physical characteristics into a being as near perfect as the imagination can conceive. This, to my mind, is a technical Fancy, and it is not difficult to appreciate how interesting, attractive, and profitable it can be made.

A Fancy, too, does not stop at mere admiration, or liking, as I fear many follow it. One can own and admire a creature, and yet not be a fancier; for a Fancy, as the above definition embodies, means development, advancement, and persistent effort toward an objective point along defined lines. A life-time of useful application can be vouchsafed in it as reflected by the beneficial results to mankind from the efforts of pioneers in its various branches—the Horse; Dairy Cattle; Sheep; Swine; the Dog and Cat; many handsome breeds of Fowls; and just as beautiful and useful for Fancy and food, the Belgian Hare and fancy Rabbit. In all these departments the Fancy has assumed such merit that the Department of Agriculture recognized the necessity for assisting by the organization of experiment stations for advanced study of the different features embodied in it.

Heretofore, the Belgian Hare and fancy Rabbit has not received recognition from a Government departmental source, but I am sure this can not remain so much longer; for once the commercial value of the Hare and Rabbit is intelligently appreciated, recognition as a national industry must follow. Progress in this direction lies with the Fancy, and it is this body that must make the Utility subservient to it, with the fact before mind that no creature can be too beautiful and physically perfect for food purposes.

A Fancier

To be a fancier, is to interest one's self in the principles embodied under the term Fancy, and as a breeder aim at their consummation so far as possible. A fancier must needs be a breeder, but a breeder is not always a fancier. To be a true fancier does not merely imply the liking of a certain classified animate being known as breed, strain, or type of animal or fowl, but as already intimated, the knowledge of an ideal toward which the liking inclines to an extent that scientific effort is exercised in its growth for perfect attainment. This implies, too, a reasonable information on structural tissue; of the laws of pro-generation with regard to merits and defects that are influenced by heredity; and of physical characteristics that classify the variety in question.

To apply one's self as a fancier can be made an object of the highest merit in that the exercise of personal qualifications which stand for honor, honesty, and business integrity can be placed on a par with all other occupations that call for man's noblest principles.

The Need for a Fancy

With regard to rearing Belgian Hares and fancy Rabbits as a matter of Fancy, its beauty and wisdom as a chosen hobby can not be questioned. In several foreign countries, notably England, the breeding of pet stock has become as much an industry of importance as that of breeding thoroughbred stock of larger animals for domestic use. For its production they enter into it with as much care as that required for a first-class specimen race-horse, dairy cow, canine, or fowl. The science to successfully produce Belgians and fancy Rabbits of their present perfection is as intricate and interesting in detail as for the above and has advocates by way of membership of men and women who stand in the forefront of educational, social, and professional station.

Fancy Rabbits are particularly attractive in many ways. They are docile, useful, and exceptionally beautiful; while as a feature for relaxation from more weighty responsibilities no finer field is open for genuine pleasure.

They are singularly appreciative of intelligent attention, and since their growth is rather quick, one's pleasure in seeing the fruits of one's efforts is sooner realized than in many creatures of other fancies.

By way of unalloyed sportmanship no Fancy brings more real satisfaction than that derived from the numerous shows for friendly competition, where often the specimens are bred so keenly to the edge of uniform quality as to almost make a judge look three ways at once. And it pays, the Belgian and fancy Rabbit Fancy does; for when choice winners of any of the varieties, Belgians perhaps more essentially, fetch as high as anywhere from $25 to $125, and win a trophy worth $50 besides, one need not wonder why such a Fancy attracts good people to membership.

I know fanciers who annually have an income from $200 to $1000 from the sale of specimens for breeding only; and in this country prices are not one-half that secured for winning specimens in England. That this is so, is entirely the fault of the Fancy here, and on the whole our stock is just as good as theirs—in many respects better in the matter of health and stamina.

The reader will pardon this personal introduction; but I have often been asked by frequent visitors to my rabbitry "What prices do you obtain for the general run of breeding specimens?" "From $5 to $25 per specimen I have heretofore considered reasonable" is my reply. To show an approximate average, I will state that for 27 there was remitted $222.

That a Fancy can be made a nicely profitable feature is further qualified when I say, that the actual cost to rear a Belgian Hare to maturity need not exceed 80 cents for a year's feeding when all foodstuffs have to be bought. Under many conditions the expense can be reduced to half this, so when one can secure stock of superior merit for such a limited outlay, and realize from $5 to $50 per specimen, such a Fancy commands more than passing notice.

A well informed fancier and author has this to say: "As a Fancy the Belgian Hare and fancy Rabbit has few rivals which can claim such concentrated advantages, for, apart from the fact that each section of society is represented in its rank as exhibitors, the world-wide popularity of rabbits as an article of food and commerce grows by leaps and bounds annually." I look forward with the consciousness, that what has become in a number of densely populated foreign countries a Fancy and Industry of inestimable value to them in various ways, will not be long distant here.

The Rabbit as a Species

The Rabbit is indigenous to virtually every part of Europe and America. Australia has also a species of Rabbit somewhat akin in type and habits to the American "Jack."

The Rabbit is a species of quadruped separate from that of the Hare, nor will the two species "mix," as many suppose, unless in very exceptional instances. It appears, also, that to whatever country the Rabbit is indigenous, it has characteristics that differentiate from its brother of the same species in another; either larger or smaller, or of varied color markings. The same holds true of the Hare in its native heath.

The Rabbit is of the species **lepus cuniculus,** and the Hare **lepus timidus,** though both belong to the family **rodentiae**—a creature with long, rat-like front gnawing teeth. Originally the Rabbit was introduced into Europe from Africa, is the prevailing opinion among zoologists, and most likely what is now Spain; from thence into Brittany, and eventually over all Europe. How long since, or rather in which of the earlier centuries this transpired is not definitely known.

In its gregarius habits the Rabbit also differs widely from those of the Hare, and in the wild state is said to be monogramous. This latter trait, however, ceases with domestication, and either sex becomes altogether polygamous. It also differs from the Hare in that its young are born immature, with eyes closed and the body nude of hair, in a nest lined with fur pulled from the mother burrowed in the ground whenever possible; while those of the former (Hare) are born with eyes open, and body nicely covered, in a "form" on top of the ground.

The fertility of the Rabbit is also proverbial, a litter containing anywhere from 4 to 12, while the female Hare rarely brings forth more than 2, and seldom as many as 4.

An old English name for the Rabbit is **cony,** and its cognomen in many others is similar to this, as Latin **cuniculus,** Italian **coniglio,** German **kaninchen,** and Welsh **cwningen;** but the Rabbit is not the **cony** of Scripture.

Each country, and in America, each state has laws which at this time regulate the destruction to which it may be subjected as game; but this point is not essential here.

For domestic purposes the Rabbit has been bred to many varieties, and virtually so from early times. As a dainty morsel it has graced the table of ancient monarch and his humblest peasant down the ages until now, so that as an article of food and commerce it is recognized the world over.

The actual consumption of Rabbit as a food is not totally known from available statistics right now, but England alone uses upwards of 25,000,000 pounds annually and in France, Germany, and Austria, as well as Belgium and Holland, it is, as already remarked, largely the food of their peasant class. What is known as the "famous Ostend Rabbit" is merely a specially reared Belgian for culinary purposes, and occupies much the same position with epicures that the Canvass Back Duck does in this country.

England has received her supply hitherto almost entirely from the colonies, notably Australia, where it was so abundant as to make wholesale destruction an absolute necessity because of menace to crops and fruit trees. I am informed quite recently, however, that the Australian species is in some danger of extermination, for it is not alone for food that its use extended; in fact, at first it was not used for this purpose at all, but for fur very extensively utilized by hat manufacturers. Because of this, indiscriminate slaughter was executed, so that now I am told by one of the largest hat makers in the world that fur from this source has fallen off in supply nearly 40 per cent. and price consequently advanced in the same ratio. This same hat maker was greatly concerned, and advanced the suggestion that it would become an absolute necessity to rear fur rabbits in large numbers for both hat and leather uses, as well as the more inexpensive furs for wear. In fact, large quantities of skins are already utilized for the latter purpose, which would seem to suggest a field for unusual profit when managed with a view to producing a specially grown article of superior "wool" merit and wearing qualities. I am convinced that this can be done.

The Flemish Giant

As the name implies, this is the largest of all varieties of rabbits. By reason of its size the meat for food purposes is not as fine grained as that of its more classic rivals, the Silver and Belgian; but on the whole is quite desirable from the fact that it does not require many months to reach the same equivalent in weight which others attain only at maturity. Its meat is therefore all the more tender and appetizing.

The origin of the Flemish is somewhat obscure, but late in the '60's or early in the '70's, there was developed in Holland and Belgium a cross-bred rabbit that was given the name "Leporine." Later this was introduced into England, and here is what one author says about it: "Since Leporines so-called were introduced into this country they have been bred continuously, but with distinct and different objects—in the one for size, and in the other ostensibly to develop a rabbit of the form, color, and fur of the wild Hare. The larger race has been called Patagonian, but is now recognized in a different type as the Flemish Giant."

It is of course, then, a "made" rabbit, which accounts, no doubt, for the difficulty encountered by fanciers to breed reliable markings.

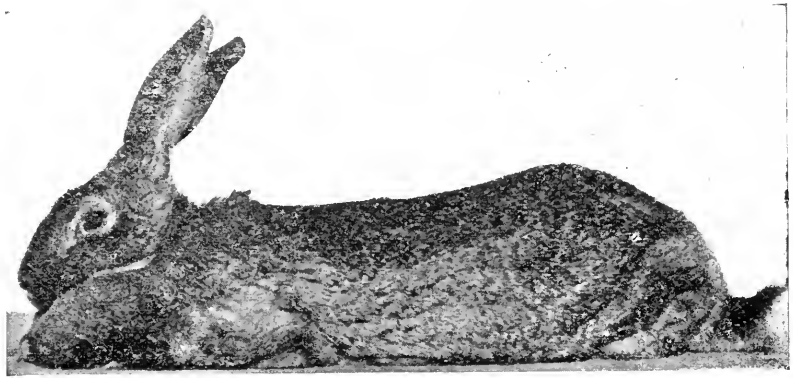
By reason of its immense size, the Flemish can without prejudice be named King of fancy Rabbits. Specimens have been produced that were said to weigh 20 pounds, while the average weight of Standard bred stock should be at least from 14 to 16 for females, and 12 to 15 for males.

Whether this can be attained by American methods under the environment and climatic conditions peculiar to this country, remains to be seen.

If one can not, or does not care to, breed this variety for Fancy, it is of excellent utility use. The mother being large, naturally has more nourishment for her young than a smaller variety; so that by a bit of attention to feeding her offspring can be made to weigh near 4 pounds at six weeks, and at 3 months will reach 6 pounds. One fancier informed me that he has grown them to 8 pounds, and some 9 at 3½ months old. In such event, the Flemish should prove decidedly profitable as a market proposition.

Mating

IN all my remarks with reference to the different varieties, I shall speak of them in the light of being thoroughbred stock. I am not in favor of mongrelism for any purpose, and all the less so in any living thing that is utilized for either food or Fancy use. The methods sug-



FLEMISH GIANT

gested are therefore done so with a view to qualify for Standard requirements, and the breeder can so apply them whether rearing stock for show or market purpose.

When getting ready to mate, look over the stock with care and see that all intended specimens are sound and of good coat. Consider size and evenness of color with particular criticism.

For utility, no particular rule for mating is essential other, perhaps, than size and health, and it has been experienced that nice, dark bucks mated to "smoky" does will produce the largest stock as to frame and weight. For show purposes, however, matters are considerably different.

Each specimen must be made an individual study with a view to fight against every fault that should **not** appear in an exhibition entry. One must pair up for length of frame and massiveness, and to this end select specimens as near Standard in points of merit as one has them. Any defect in one of a pair always appears liable to show itself with more emphasis than a desirable point, so that it is all the more important to select breeders of perfect body, good ears well set on, nice large eyes, straight and strong limbs, perfect set tail, massive and firm body as near of the steel grey color as possible. Mate dark steel greys, if one has them; but if there is ruddiness in one of the mates, it must not be on the male side. A black or intensely dark steel buck mated to a ruddy doe, usually gives good results; for in breeding Flemish it appears necessary to frequently fall back on black to maintain the essential dark tinge for true steel color effect.

A black buck mated to a light steel grey doe will reproduce dark steel greys, and a dark steel grey buck mated to a black doe will result in a shade that seldom fails to attract a knowing judge.

(Here the matter of in-breeding, cross-breeding, with the introduction of new blood into one's strain, as well as the originating of a strain, might be properly discussed; but since this reasoning applies virtually the same in all varieties, I will refer the reader to this section under Belgian Hares, where considerable attention is given the subject.—Author.)

Littering

THE period of gestation is 31 days, and if it varies more than a day longer, or two at most, there is something wrong. The doe will begin building her nest and pull fur to line it with, any time from 10 to 3 days before due to kindle, so that it is necessary for her to have material for the purpose such as short hay or straw scattered about the hutch.

Have the nest box so situated, if possible, that one can look into it without moving out of place, and sufficiently roomy for the doe to have free movements within so as to obviate danger of trampling the young. And I will say here, that Flemish require larger quarters in general than any other variety, because of their size. Plenty room means better success with them.

A few days before the doe is due to kindle have before her continually a dish of clean, fresh water. Many does become feverish at this time, and will not infrequently destroy their young if the desire for water can not be satisfied beforehand. This would be unfortunate, and occasionally it genders the desire for blood to the extent of making cannibals out of them with every subsequent litter.

After the doe has kindled, look over the nest and see if any dead are among them. If so, remove these with as little disturbance as possible, at the same time diverting the mother doe's attention away from the nest with some tempting greens or other delicacy.

The matter of permitting a doe to bring up an entire brood is for the breeder to decide, but best results will eventuate by leaving no more than 6 at most. Above this number calls for extra attention with food and care.

I know not a few who have succeeded in bringing up litters of 9, 10, and 11, one instance of which turned out every one a prize winner. But as a matter of Fancy, few fanciers permit a doe to rear more than 4, fostering the remainder with a doe bred at the same time, or destroying the smaller ones out of a batch.

With Flemish it is desirable to attain as rapid and as much growth from the first day on one can, and the more young there are in a nest, the more each will hinder the other's development. It is only a matter of several days, also, until there is a tyrant in the lot who preempts more than his individual share.

Flemish can already in the nest from the first day be quite well selected for quality as to prospective Standard points, like this—steel greys are known by their pink bellies and dark backs, while the blacks are virtually one shade on back and belly alike. What will turn out as light greys will have decided pink bellies, the tinge of which spreads well up the sides.

During the time a doe is suckling her young, an excellent dish to help growth is a sop of bread and sweet milk in connection with the evening mess. This is also an ideal "conditioner" for the young after leaving the nest up to 6 weeks old.

With regard to feeding generally, each fancier seems to have a method he personally thinks best. Some do quite well, while others have less success; but I am safe

in saying that more rabbits are lost from injudicious and too frequent overfeeding, than from insufficient and less frequent.

Flemish are fed along similar lines as Belgians, to which exhaustive chapter I refer the reader. And just bear in mind continually that this variety is the largest rabbit, and therefore requires approximately more food.

Care and Attention

CLEANLINESS is just as essential for the maintenance of healthy stock as regularity and quality of feeding.

To render one's stock a pleasure and profit one must have no smaller measure of enthusiasm, which implies, that what is worth doing at all is worth doing well, as some moralist has it. No man can be a true fancier or successful breeder and make a name for himself unless he diffuses enthusiasm throughout his hobby. Every creature reared for man's pleasure and benefit must be made comfortable if its most perfect physical characteristics are to be expected.

For instructions regarding care and attention of stock, I refer the reader to that laid down for Belgians.

List of Weights

I HERE append a schedule of weights that are possible for Flemish to attain from correct methods of care and feeding:

1 Month	2 lbs. 6 oz.
2 Months,	3 lbs. 12 oz.
3 Months,	6 lbs. 6 oz.
4 Months,	8 lbs. 8 oz.
5 Months,	9 lbs. 8 oz.
6 Months,	10 lbs. 8 oz.
12 Months,	13 to 15 lbs.

and as they advance to 15 and 18 months, their weight should be that of fully matured specimens—15 to 18 pounds.

It must be remembered that bucks are rarely as large as does, and the Standard is very liberal when it places the qualifications for weight as low as "no less than 11 pounds for bucks, and 13 pounds for does."

To Prepare for Shows

WHEN one desires to exhibit at shows with the hope of winning prizes, some special attention to stock beforehand is necessary and if several consecutive exhibitions are scheduled one must not forget that such journeys with their incident "wear and tear" will be a severe tax on the constitutional stamina of finely bred

specimens. Many an excellent rabbit has been destroyed by overshowing, or insufficient attention connected with the journey. And we have no short distances of shipment, either, nor do the express companies run special cars for exhibits of this sort. Reading over the excellent show reports by our English fancier friends, I was often amused at the concern that occupies them with regard to distances, which at most is rarely beyond 200 miles, and seldom above 50. Here we are obliged to consider time rather than distance, and very seldom, except with small local shows, that less than 600 miles are involved.

Make careful selection of the specimens intended for exhibition, and, say 4 or 5 days before date of shipping, place each separately in a coop as near the size to be occupied at the show as one can arrange, and something within about 10 degrees as warm as one would think the show room to be. This consideration is quite necessary, and all the more so when stock has been open-air reared. The fact that rabbits are fur animals, and thus quite densely clothed, seldom finds thought in the heads of show committees, who more often place such exhibits in steam heated rooms than a proper environment.

Coops containing exhibits must be kept scrupulously clean so as to obviate all danger of soiling the fur, which should every morning be liberally sprinkled with talcum powder, nicely tousled through as to get near the skin, and then combed and brushed until the powder is all worked out. First two days use a wire brush, and subsequently a medium soft bristle. Use no water or cosmetics of any kind unless there is some disease of the skin that needs attention. Under the chin and belly stroke the fur with a small round stick shaped like a baton or drum-stick. This will bring out contour to the head and body, and acquaint the specimens with the pose expected by the judge. This attention must be applied only to bucks of the Flemish variety, and not to does. The latter must be stroked entirely by hand, and the dewlap gently manipulated so as to assume correct position and shape—evenly placed beneath the chin.

There is a popular notion that raw egg fed to a fur animal will produce "sleek coat," and that gunpowder fed to a horse will increase his action. Now while many of these "notions" appear amusing, and often quite worthless, there are others, withal, that have more practical sense than humor; for in the above there exists no small physiological virtue. Egg, we know, is rich in albumen, and gunpowder in the necessary reconstructive elements—carbon, potash, nitrate, phosphorus, and sulphur, which enter into tissue construction of which nerve and muscle is made up.

Raw egg can be given in the form of flip, which is made by beating one in a cup of sweet milk, add a teaspconful sugar, and two tablespoons of Sherry wine or brandy. If the animal will not eat this out of a dish, it can be given by spoon or pipette.

Whole wheat added to oats is also excellent a few days before showing. It is rich in gluten, and this latter puts "bloom" on the fur.

After return from the show, an egg-flipp is again a good "pick me up" for the effects of wear.

Have the shipping coops sufficiently roomy so as not to crowd, floor well littered with saw dust or chaff, and ventilation for comfort.

The Rabbitry

IT IS not by any means essential to keep rabbits in fancy quarters, so that the outlay in this direction need not necessarily be in one's way to become a fancier and breeder. True, when one has taste for something a bit out of the ordinary, bunny will appear all the prettier in a finished house, and perhaps a trifle more comfortable than in a mere store box; but that he cannot be successfully reared in the latter has been demonstrated otherwise. Flemish, of course require a more roomy home than any other variety, yet because of their docile disposition and general hardiness, will do well where others perhaps require more attention.

Show specimens, however, need more room than is required for utility breeding so as to keep fur and physical condition persistently on edge.

It is always advisable to have at least something of a run outside the coop, even if it has to be limited, for a rabbit is not congenial when obliged to remain continually where her nest is. If one can so locate the quarters that an occasional run in the open can be arranged, this will do wonders toward the maintenance of health—and how the native instinct becomes apparent during such runs, is a real pleasure to see.

I have seen rabbits reared successfully in boxes no larger than 2x2x4, and I have seen them die by the dozen when kept in such quarters. Close confinement means close attention. As with all creatures, exercise is a large factor toward keeping them well; hence the more room one has available to give comfort from this source, the more likely will one's hobby prove worth while.

For complete details concerning plans, dimensions, and additional ideas about hutches, see Belgian chapter.

Standard for Flemish Giants

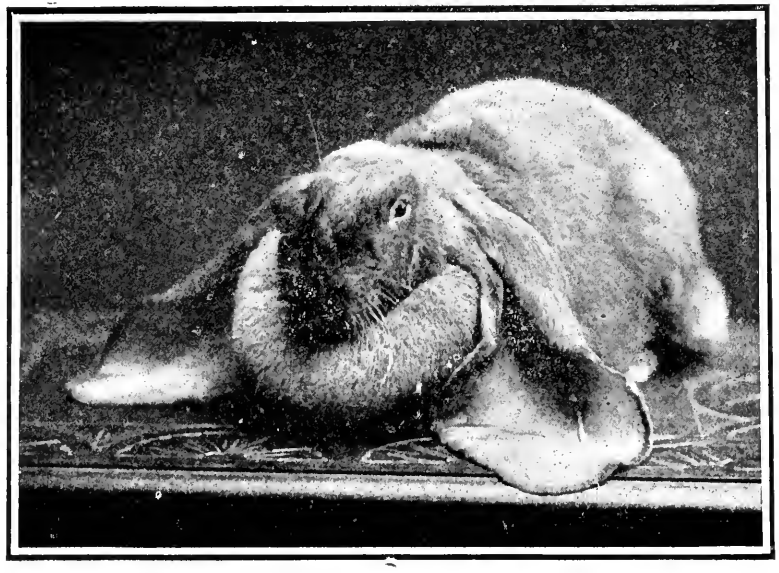
	Points.
Size and Weight—Bucks no less than 11 pounds. Does no less than 13 pounds.	
Size considered irrespective of weight,	30
Color—Dark steel grey, even or wavy ticking over entire body; head, ears, chest, and feet alike. Belly, and under part of tail, pure white	20
Body—Large, roomy, and flat, with broad fore and hind quarters. Does to have dewlap, evenly carried,	15
Legs and Feet—Strong in bone, large and straight, color of them to match that of body,	15
Head and Ears—Head large, full, and shapely, with large bold eye of dark brown color. Ears moderately thick, carried neatly erect. Head and ears to match body color,	10
Condition—Full, short coat, flesh firm, healthy	10
	100

Disqualifications

ANY grey, steel, sandy, or other shade on the belly or under tail, except a streak of grey in each groin. Sandy, brown, or red color mixed through the body fur. Inferior size, crooked legs, barred feet, screw tails, lopped ears, camel backs, and small narrow heads, or heads entirely too "bull-shaped."

I will also add, that there is no small tendency for Flemish to throw a ruddybrown color shade; and while stock of this tinge usually has the making of large specimens that will do well for utility use, as show exhibits they are absolutely worthless in the eyes of an expert judge.

To breed true and harmonious steel grey is no easy matter, and the correct Standard shade; or rather, permanent color is rarely apparent in its perfect tone until completing the second molt.



SOOTY LOP

The Lop Ear

The Lop

AS A fancy variety, the Lop has made itself decidedly popular, and while perhaps not so much so in this country as in England and Germany, it has, withal, many admirers. Its principal characteristic is the large ears for which it is noted, and specimens of enormous proportions have been produced in recent years. Instances are recorded with an earage of 27¼ by 7¼, and a weight of 12 pounds. Because of this immense earage, however, its breeding for purposes other than Fancy is not so desirable as that of less bothersome varieties.

Ears

FOR show purposes the Lop has two classifications—one for entries of **classified length,** and the other for **any length.** For the former, classification usually exceeds 24 inches, to any possible limit beyond this; while in the latter no specification is made, and these specimens are judged perhaps more for universal quality than earage alone.

Measurement of the ears is taken from one extremity across the head to the other, and the width of one ear must be at least one-quarter of the total; that is, if the earage is 24 inches, the width of one ear must be 6 inches.

There is also a characteristic pendancy to the ears when in natural sitting pose that must be looked for in well bred lops, which is due to a correct juncture of their roots with the cranium. This is an important point, and means that an ideal specimen has the contour of head over its highest portion where it joins the first (cervical) bone of the neck so adjusted as to compel the ears to suspend uniform, and gracefully curved around their convex distension, without collapsing appreciably in any place except where touching the floor.

Pose and Shape

WHEN the head is posed as just described, it gives position to the animal throughout, a point that qualifies for Standard merit. This will naturally approximate the fore legs beside each other from elbow to toes, so they are evenly paired under the rounded breast, and not much more than foot-length visible; neck rather sharply curved so as to start the back-curve from shoulder junction in a uniform, almost half circle, free from projections, to the root of the tail—"in the buck rather straighter in saddle outline."

The hind legs are uniformly straight by the side of the body, toes not pointing away nor toward it, and flat on the floor from knee-joint forward, altogether "humping" the body between two strongly outlined shanks so as to make it appear almost balanced in the middle of them.

Color

UNLIKE the Belgian and several other varieties, Lops are bred to no specific color, unless solid blacks can be so identified. They are represented in sooty, fawn, white, grey, yellow or modified buff, blue, and self; or in broken colors of yellow-and-white, grey-and-white, blue-and-white, or black-and-white.

In the distribution of these colors there should be some appreciable regularity in that they are not to smear into one another, while "the saddle should be entirely self, the markings breaking at the shoulders."

Butterfly

THE head "has a star or blaze on the forehead; but its chiefly marked feature is the butterfly, a marking which, while it leaves the nose with no trace of white, is broken on the outline, resembling this beautiful insect."

This singular resemblance is physically due to the characteristic anatomy of a Lop head—the rounded, lateral-and-forward convex nose; conspicious eye brows, and rather broad appearing forehead formed by the root of the ears.

All these points enter into classic breeding of this variety.

Eyes

THERE is nothing special about the eye of a Lop other than it should be sound and attentive. But I will add, there belongs yet something that makes it decidedly characteristic of this variety of fancy Rabbit. The inordinate size of those pendant ears demand an anatomical adjustment of muscle and cartilage about the cranium that creates more or less corrugation around the eyes, which causes a singular droll expression quite typical of the Lop. It is an appearance of earnest effort to keep the eyes open in spite of those large ears.

Tail

MUST be perfectly straight, and "carried well up the body, without any suspicion of a twist." To carry the tail side-wise does not imply a twist in it, nor is it necessarily a disqualification when the specimen is otherwise meritorious.

BLACK AND WHITE LOP

Breeding

AS remarked, the object of breeding Lops is virtually alone for their earage, and there has been considerable contention among fanciers just where success comes from—correct strain, or correct attention. Arguments of intense warmth and no small acrimony have been freely exchanged on this point, but I am reasonably certain, that if the strain is not endowed with inherent propensity to procreate well developed ears, there is small chance for meritorious success.

The matter of artificial heat will, without doubt, also accentuate growth of ear; and when natural weather temperature is below 70 degrees within, the quarters become a necessity, notwithstanding all arguments to the contrary.

One prominent English authority insists that it is impossible to produce earage beyond 24 inches without artificial heat, but we must bear in mind that there is a marked difference in climate between our country and that of England, and that warm days are not so many there as with us. Tnat artificial heat is extensively used by European fanciers is a fact, but whether it is a judicious procedure for the welfare of the breed is a question.

For the mere purpose of Fancy and general admiration, one can derive virtually as much pleasure from the "any length" class—say, 20 to 25 inch earage—as for extra length. The latter is largely a fad.

With regard to mating, care, feed, and general attention, the breeding of Lops does not differ essentially from that of other varieties, other than added care for the ears, which persistently hang on the floor. For this particular it is necessary that the quarters be kept clean continually, and the floor well covered with clean bedding of sawdust and chaff, straw, or hay. A dirty floor will soon bring on disease of the ears, and once this takes hold in a flock there is no end of trouble.

Littering

FOR obvious reasons, it is not desirable that nest boxes are given the expectant mother doe. If the general habits of a Lop are considered, along with the preponderant ears, it will be plain that the more room a doe has, the better able will she be to care for the young. All she requires, therefore, is sufficient material with which to build a comfortable nest in one corner of her coop, along with the wool she will take from the body to line it.

After kindling, see that no dead ones are among the litter, and for reasons of success, reduce the latter to no more than four. I would suggest a foster mother rather

than destroying them, particularly so when one has a reliable strain for earage; for it often happens that those from which the least is expected turn out best in the end.

It is simply astonishing with what rapidity the ears of a young Lop will push for length. An old fancier who has bred this interesting variety for many years informed me, that if the quality of a specimen is not apparent by length of ear in 10 weeks from birth, there is small purpose in bothering further with it. He tells me that he has often measured the ears of a youngster on an evening, and by the following morning there was an additional 2 inches in length. One would scarcely believe this possible but I have not the least reason for doubting this fancier's word. This qualification implies, that an earage upwards of 20 and 22 inches must show at the end of 10 weeks, and that further length is very limited.

I have often seen it in print that many practice "pulling the ears" to accentuate length; and on the other hand the accusation was also denied. Whether true or not, this practice should be condemned—with punishment, if necessary.

Standard for Lops

THERE are now two standards by which this variety is judged—for the Limit Classes, and Any Length Classes. The former has special significance for earage, while the latter considers the specimens as a whole.

		points
Limit Classes:	Ear length,	15
	Ear width,	15
	Substance & Shape,	5
	Shape & Carriage,	10
	Color & Markings,	15
	Condition,	10
	Straight feet & Tail,	10
	Eye,	10
	Size,	10
		100
Any Length:	Ear length,	25
	Ear width,	20
	Substance & Shape,	5
	Straight feet & Tail,	10
	Color & Markings,	10
	Condition,	10
	Shape,	5
	Eye,	10
	Size,	5
		100

Varieties of Domestic Rabbits

Many varieties of rabbits have been "made" by domestic breeding, and here follow the more prominently recognized by fanciers: Flemish Giant, Lop, Dutch, Angora, Himalayan, Polish, English, Siberian; the Silver in Grey, Fawn, Blue, and Brown; the Tan in Blue and Black; the Havana, Imperial, Selfs, and leading all, the Belgian Hare.

The Dutch Rabbit

By many this is claimed as the handsomest variety of all domestic rabbits, and with considerable justification.

The Dutch is not as popular in this country as in England and Germany, though it is making friends fast.

There is about this variety a certain fascination that ought appeal in particular to fanciers with a critical eye, for its color markings are such as to make a scientific breeding an absolute necessity.

It has been said that Dutch are "hard to raise;" but why more so than other varieties has not been made clear, to my satisfaction at least. Were such the case, it is likely the trouble lies with the breeder rather than in the breed.

The Dutch is not a large rabbit compared with domestic rabbits in general. Standard qualifications want it comparatively small; so if there is any lack of stamina in the breed, it is possibly owing to a persistent effort at keeping down weight, accentuated also, by close in-breeding.

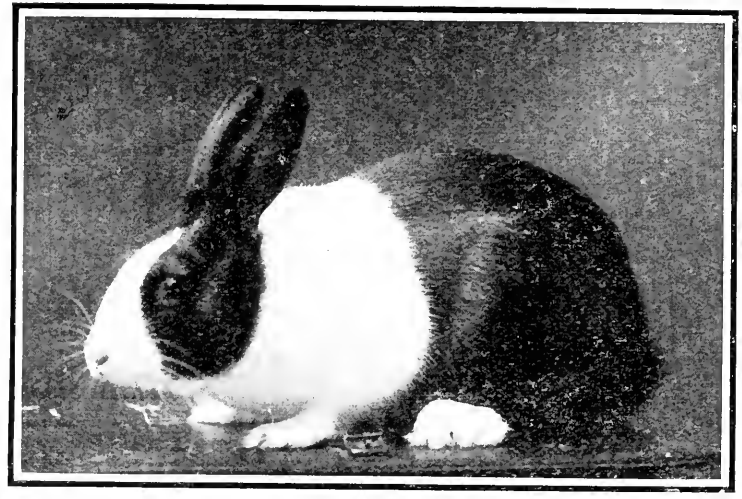
Color

COLOR markings of this variety are characteristic and very pronounced, one color being always white, and the other either black, blue, tortoise-shell, or a type of steel grey. The solid colors must be typical of the parts they cover, and distinctly separated from the white. Neither shall smear into the other, and both must be entirely free from foreign hairs. Fancy value of a specimen depends altogether on the perfect markings thus characterized.

White must be the marking of shoulders, fore legs and feet, under jaw and nose upward to between the ears, forming a distinct blaze. About two inches of the hind legs from toes upward is also white. Solid color covers the saddle from short ribs back all but the hind feet, and its junction with the white must be as clean cut a line of demarkation "like a string about the waist." Both sides of the face, jowls and ears, are of the same solid color, just as evenly separated from the white.

Breeding

THE biggest contention associated with breeding this variety lies in persistently keeping down size, and maintaining solidity for the two color markings. Owing to a lack of enthusiasm and interest in the breed for a time, these points became seriously defective, but renewed life



DUTCH

in the Fancy has in the past eight years largely overcome this trouble, and if present devotion is any criterion, it will not be long until the variety will again come to its own in the family of admired pets.

To breed high quality Dutch there is but one road to real success—that of establishing a reliable strain.

Start right, and the battle is near half won in the knowledge of personal results that relate to points of merit or demerit.

The greatest contention is to overcome a propensity for foreign hairs and splotches in solid markings, notably on the sides and flanks; specks in the eyes, or distinct discoloration; and white inside the ears.

When mating it is advisable to use breeding stock that has maintained solid markings after its second molt. Intelligent attention to this factor has been a leading guide to the establishment of permanency in markings; and largely, also, for physical characteristics in general.

The breeders whose success I have noticed as most pronounced, mated either a second molt buck to younger does, or a two-year old to yearling females. Greatest stress was laid on color characteristics in the male, while the females were selected more for inferior size; thus, as near as possible, equalizing points for both color and weight.

Physically, the Dutch of whatever markings, is a beautiful rabbit when rightly bred. It should be neither racy nor cobby, but a graceful medium to which there is sufficient length that does away with pudginess. Never to grow above 5½ pounds, size and grace should be harmoniously proportioned to make an ideal. The ears are perhaps a trifle on the small side comparative to specimen.

As to markings, these are so well outlined in the young when born, that one need not waste effort in bringing up what will likely turn out worthless ones. I am alluding to the line of demarkation separating the colors. If this line is ragged or irregular, colors will show the same when fur is grown out.

Feeding

STANDARD weight for show purposes is 5 pounds, and not over 5½, hence one must keep in mind continually that overfeeding conduces to overweight. In fact, they do not seem to require as much as a few other varieties of the same size to keep in good condition; and so far as the nature of food required, there is no essential difference with that of other breeds—with the excep-

tion, perhaps that not quite as free a supply of greens be allowed. This latter conduces to a disease known as **scours.**

Quarters

EVERYONE will readily understand, that a small variety of rabbit does not require so much room as a large. The quarters should be comfortable, clean for the sake of color as well as health, and sufficiently high to allow free jumping exercise.

To keep down weight by exercise is far more desirous than doing so by stinting food. Exercise and air make for vigor and "blooming" fur.

Standard

		Points
	Blaze and Cheeks,	15
	Clean neck,	10
	Saddle,	10
	Undercut,	10
	Feet-stops,	15
	Ears,	10
	Eyes,	5
	Color,	10
	Size, Shape & Condition,	15
		100
		Points
Negative Points:	Small specks on eyes, ..to lose	10
	Discolored, or wall eyes,..to lose	20
	Distinct spots, or flesh marks..	20
	Over 5½ lbs. in weight,	20
		70

WHITE ANGORA

The Angora Rabbit

In this country, the Angora has been heretofore an exclusively ornamental variety. It makes one of the most attractive pets one may wish, and in the show pen one of the finest exhibits.

In several European countries, notably France, this variety is reared quite extensively for its fur as a source of income by the peasant folk—furriers buying all that is rendered.

As a matter of information I will mention here, that one rabbit is estimated to furnish "wool" at a value of 5 to 7 francs per year, or approximately 20 fr. for three years, after which it is considered worthless by reason of the "wool" becoming too coarse, and is then consigned to the peasant's food supply. One specimen is "pulled" twice each season, much after the method our forefathers employed to secure down from geese.

To us hurrying and much-wanting Americans this source of income would scarcely appeal right now; but permit me to prognosticate, that time is not far distant when breeding rabbits for fur purpose will become an actual necessity—unless the wearer of fur and felt hats gradually affiliates himself with some sort of inferior substitute. Of this I have been assured by one of the largest manufacturers of felt hats in this country, and he qualifies his assumption by saying that "it will be but a few years from now for us to see rabbit farms in every community."

This would seem to bring the Angora forward as a desirable rabbit along these lines—essentially so for cross purposes with other varieties to attain the most advantageous fur.

Among a batch of mongrel rabbits I saw shipped some time since to a New York commission house, was a specimen apparently the result of mating a near Angora with a part Belgian. The singularly beautiful fur attracted my attention, and by looking it over carefully, was impressed with the possibility of what the hat industry opened to one who would give scientific attention toward the attainment of a species of fur rabbit for this purpose—possibly from cross-mating thoroughbred Belgians, Angoras, and Silver Greys.

For Fancy

AS REMARKED, for purposes of Fancy the Angora is very attractive, and makes an ideal pet. It is perhaps the most docile of all varieties, tolerating whatever handling is required to keep it so with entire freedom.

Because of its long and delicate fur, it must of necessity be brought up in positively clean quarters. Constant

disinfection must be applied to keep them so, and it must be remembered at the same time that all animals and creatures with long "wool" are ready carriers of disease germs.

In its most perfectly developed form the Angora resembles a puffy ball of snow, with the head almost hidden within its fleece. The longer and finer in texture its wool, the higher its value as a Fancy specimen. Wiry type of fur is not desired nor correct, while a tendency for it to mat appears an evidence of high quality.

It is bred, of course, mostly in white, though recently some effort is being made to bring out what are expected to be blacks and blues. These latter have created quite some controversy among their fanciers antagonistic to several judges who passed on them with considerable question—rather in the light of sports "in smoky color" than a bred up variety of true shade. The fur of blacks and blues has been found, also, to modify with each successive molt to an extent that one is scarcely distinguishable from the other.

Breeding

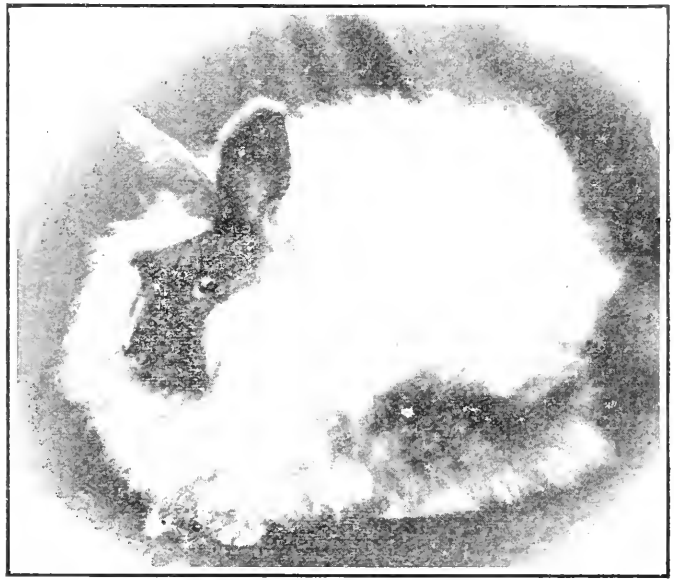
OUT of the 100 points called by Standard requirements, 55 are demanded for **quantity, quality,** and **length** of wool. This should indicate to the intelligent fancier along what lines specimens ought to be selected to reproduce these qualities; and since the procreative functions are always more pronounced in the male, it becomes essential that this side of the line is well balanced. In no instance of breeding live stock am I in favor of feminine characteristics to preponderate in the male, but when mating Angoras for the particular qualifications above mentioned, I am positive that femininity on the fructifying side will produce best results. A coarse male rarely fails to reproduce coarse effects in both body and fur of his offspring. True, have the female as fine and pure of fur as available, but rather let size and front furnishing be the preponderating characteristics.

Tufts on the ears are also an essential show quality, and should preponderate in the male.

Grooming

MANY an otherwise qualified specimen has failed to win, simply because it was carelessly groomed, or not at all; and to groom properly is a matter of no small attention.

The exceeding fineness in texture of fur indicates that the skin is compactly covered with almost microscopic hair follicles, and to be in any way rough to these with coarse brush, comb, or confections, possibly, means a coat that will eventuate into coarseness. First essential, then,



BLACK AND WHITE ANGORA

is to keep the skin clean and healthy from the day youngsters begin to show Angora wool type. For some months this is not a bothersome attention, providing the quarters are kept clean and well bedded with shavings or fine hay. An abundance of the latter will do wonders by merely sifting through the fur, but to accustom the ball of wool to handling, and nurture the tender skin so its covering remains soft and fluffy, occasional brushing with a freely flexible wire brush, followed by a medium bristled hair brush, is desirable. At any rate, do not permit the coat to mat. But should this happen, and the specimen is desired for exhibition purpose, a genuine shampoo becomes necessary. Whatever one fails to do, under no circumstances fail in preventing vermin getting into the coat of an Angora; for here is trouble that becomes very real once it has a start.

To prepare a specimen for exhibition, one's object must be to have tne skin and fur virgin white and clean, which is best accomplished by means of a shampoo and dry brush.

Select a warm place, say, 75 to 80 degrees, and water of at least 98 to 104. Apply the shampoo with the wool scruffed "wrong way," use gentle rubbing, and then wash off with clean warm water, followed by a rub-down from a soft Turkish towel. Before the fur is altogether dry, dash through it a bit of good Bay Rum, then finish. When brushed well, muss up the fluff and sprinkle through it borated talcum powder, which is in turn thoroughly gotten out by liberal brushing "in every direction" until the wool is woozly soft as the driven snow. There is no danger of the specimen taking cold if these directions are observed. Just be sure the fur and skin is entirely dry, and when Bay Rum and talcum is applied its pores are effectually protected.

I have often been asked what to do for the removal of brassiness and stains, and "what to apply to make a pelt pure white?" If brassiness is not inherent with the strain, and stains nave not remained too long, a shampoo is usually sufficient. But remember, there is a vast difference in brassiness acquired from environment and that of heredity, and in a properly cared Angora ought not to show.

Standard

	Points
Quality of wool, ...	30
Length & Quantity, ...	25
Front Furnishing, ...	10
Ears—tufted, ...	10
Size & Shape	15
Condition, ...	10
	100

The Himalayan

In Europe this variety of rabbit is reared in consider able quantity for its fur, and many fashionable women carry pelts with the belief that they are wearing beautiful ermine.

The Himalayan is one of the handsomest species of domestic rabbit that can be desired, and beside being an ideal pet, brings real satisfaction to the critical fancier in the breeding of it for classic points. It is worthy of a stronger position in the Fancy than it now occupies.

By way of description it has a beautiful white coat of short, fine, flossy fur, soft as down, and looks at one with droll, attentive pink eyes. The nose, ears, tail, and four feet are deep chocolate black, a beautiful contrast to the white dress over all. If these black points are deep and dense, and nicely even separated from the white, a specimen becomes all the more enhanced in value.

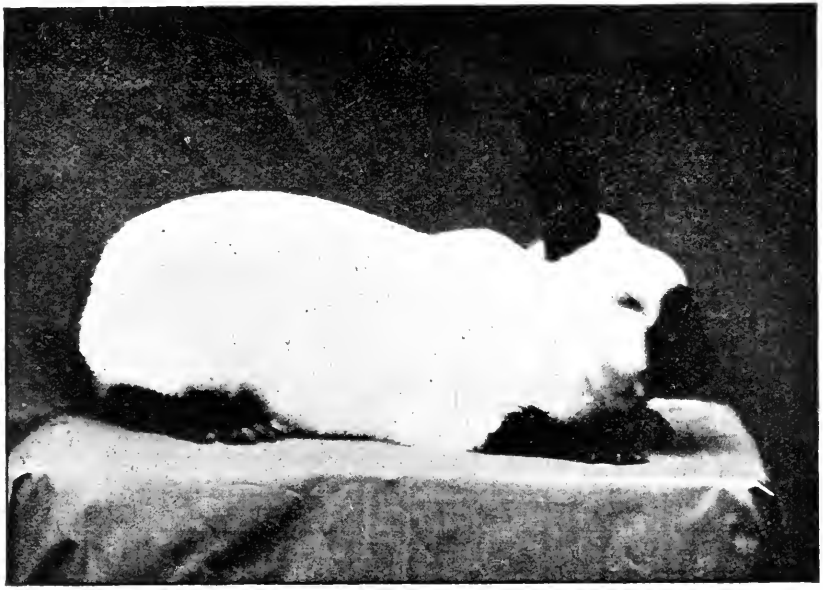
The young when born are white entirely, but about a month old the dark extremities begin to come out gradually, and at four months their development is complete.

A singular peculiarity about this variety is the anomaly of their black points growing lighter on exposure in the sun, and for this reason their breeding should be conducted in hutches with subdued light. In-door quarters would therefore appear best adapted for successful effect, and which, on account of the delicate fur, must be kept scrupulously clean.

In size a specimen should not exceed 5 pounds, and in general physical outlines conforms harmoniously with that of Dutch. Ears are neat, small comparatively, and black to the roots. No dewlap. White fur entirely free from blemishes of alien color.

To make all salient points clear with regard to rearing this variety successfully, I will quote verbatim how a reliable breeder says in "Fur and Feather" he goes about it: "Allow the young to remain with the doe until they are 8 or 9 weeks old. If you take them away before, they will in all probability stop growing, and a young Himalayan must keep on growing until it has got all its points cleared.

"With regard to mating, the question of relationship does not concern me so much as fitness from the standpoint of increasing points of excellence, and correcting faults. I never trouble about how closely they are related, providing they are perfectly sound and robust. Never on any account in-breed from stock tainted with any kind of disease, or regret is sure to follow. For my



HIMALAYAN

part I like stock closely in-bred, because it keeps your operations more closely confined. (Of this theory associated with breeding the English fancier is virtually obsessed. I will refer to it in the chapter on Belgians. —Author.) These are the lines I work on, and I feel sure a great many of the most successful breeders of live stock have done the same.

"As to feeding, I never found that Himalayans wanted treating any different to other kinds of exhibition rabbits, only perhaps, that you should not give them quite as much green food, and not change it quite so often or so suddenly, as they are very subject to looseness. In very hot weather let them by all means have a drink of cooling water; but don't leave it in the hutches that they knock it over, for this soils them, and spoils the color of the feet.

"And now I must get to feeding. Some Himalayan fanciers swear by hard feed and some by soft, but I don't stick to either. I just give them a nice change as often as I think good for them, and if I find a rabbit does not care for the food I am giving, I take it away and give something it does like. Oats and wheat are the staple food for breeding stock and growing youngsters, but when preparing them for exhibition I like soft food, because I can then mix together various kinds of food of an oily nature, and this keeps them on the move, and the molt. As soon as I have got their points clean, however, I give them hard feed, and three times a week some bean and pea meal, just to tighten them up and get them in fine condition.

"I have referred to food of an oily nature, but this in no way gives them color, which must be bred for, though it gives their dense points a luster which is so fascinating, and which a judge likes. Some of the oily foods I used were linseed and molassine meal, whilst I have also used with great success a mixture of cod-liver oil and lime water—the lime water taking away the fishy taste from the oil. This is a fine conditioner and flesh-forming food for any kind of rabbits that are inclined to be poor and in low condition.

"And just a few lines with reference to stained eyelids. I am very much afraid we shall have this defect for a considerable number of years; in fact, I very much question if it will ever be gotten rid of, unless Himalayan fanciers import quite a fresh lot from their native land."

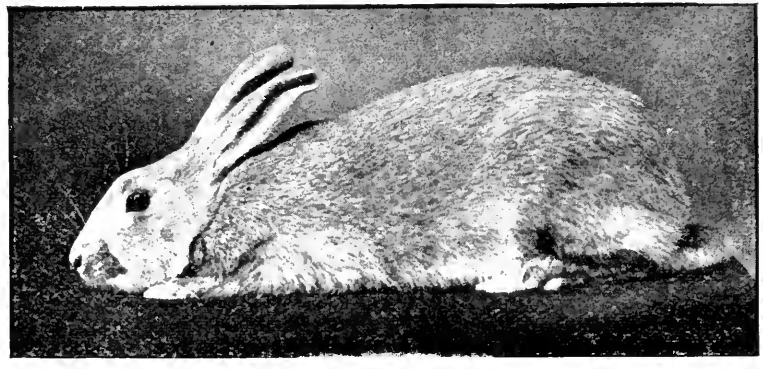
Regarding the above points on care and feeding for Himalayans, I quoted the writer entire, for the reason that he conveys with but slight modification the process pursued by virtually the whole English Fancy. It gives the reader a clear idea how fancy Rabbits are reared over

there, and to what fastidious lengths they will go to make a specimen showy. After results do not seem to be considered, and in the light of such effort, with its concomitant environment as to climate and limited quarters, one need not wonder that stock coming from there is without stamina, and too frequently diseased. Once we are obliged to rear stock for show effect only, there will be small interest for the scientific breeder. I allude to the efforts at forcing Nature to yield beauty at the expense of inherent physical qualities.

It is a physiological fact, that rabbits with pink eyes are not so tolerant of light as those with dark. As an act of comfort, therefore, if for no other reason, they should be kept in dim light quarters; and particularly should the young be protected until at least 6 weeks old.

Standard for Himalayans

Density, shape, and size of markings:	Points
Hind feet,	20
Fore feet,	10
Ears,	15
Tail,	10
Nose,	15
Quality of fur,	10
Shape,	5
Size,	5
Condition,	10
	100



SILVER GREY

Silver Grey

Here is a distinctly useful variety of domestic rabbit, and in referring to its physical characteristics, I wish at the same time to express a hope that shall actuate a better appreciation for the real merit to which it is entitled.

On superficial observation the Silver will scarcely be estimated as handsome, but on close examination of a correctly bred specimen there will be discovered a delicacy of fur that is a lot nearer silk than wool, and when that beautiful "pepper and salt" silvering is seen shimmering through it, there can not fail of real enthusiasm for the production of a good type animal.

The Silver is neither large nor small, ranging from 5 to 7 pounds. It has not the racy, reachy style of the Belgian, nor the compactness, "get together" appearance of the Flemish. Fine of bone, clean and dainty, delicately valuable fur, and as near an ideal meat as the most fastidious epicure can demand. Indeed, it is almost too fine a meat, so that cross-mating, say, with the Belgian largely enhances its food value.

I have given considerable attention to finding the origin of this variety, and while it is essentially an English product, the several fanciers who have rendered an opinion were so diversified, that I am loath to say anything authoritative.

One may inquire why this variety is named "Silver Grey" rather than merely Grey, as one is readily impressed on first seeing a correct specimen. There is a certain shimmer to the fur that clearly conveys the tinge of silver, due to a proportionate number of tipped hairs evenly distributed, known as ticking. The shade may vary from light to dark silvering according to the greater or lesser quantity of light hairs. In fact, from the standpoint of Fancy, the value of a Silver is estimated entirely by the evenness of its silvering, which ought to be as near alike over all the animal as possible—ears, nose, feet, and tail should match body color.

Undercolor is by some termed **slate blue**, and by others **blue black**. This should extend distinct to the skin. What is often an otherwise good specimen Silver Grey is frequently made inferior by entire lack of undercolor on the chest—a point to be constantly kept in mind when one's matings are made up, or new stock purchased.

Likewise, specimens that are otherwise evenly silvered but have a "cloudy" appearance usually possess a strain from the Browns.

Breeding

THERE is but one essential to the successful breeding of Silvers—stock of even markings on both sides. This implies that males and females are as near like one another as one can possibly have them. If anything, undercolor is perhaps of more vital consideration than surface color, which, as remarked, must have the evidence of even silvering. The coat should be short, and of such feel and consistence like silk.

It is claimed by breeders of this variety, that richness of silvering is intensified by warmth. This, of course, comes from the English method of rearing the variety, and where climate and consequent environment must be considered. Also, the propriety of winter breeding, always injudicious unless accompanied by artificial heat. The latter a factor only when one breeds for show classes as scheduled according to age limits at all times of the year.

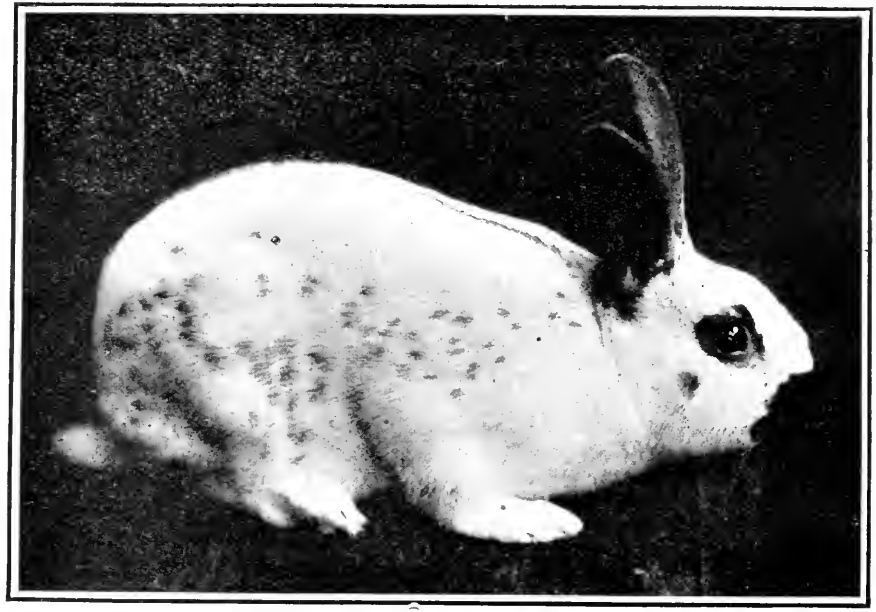
At the age of 6 months the finished luster of a Silver is supposed to be complete.

Standard

	Points
Undercolor, a deep rich blue black,	25
Evenness of silvering throughout,	20
Sharp, even bright ticking,	15
Short, full coat,	15
Ears, neat, well set on; bold, bright eyes,	10
Condition and shape,	15
	100

Silver Fawn, Silver Brown and Silver Blue

are varieties not recognized to any appreciable extent in this country. At shows one sees occasional specimens purporting to represent them, but their breeding is of such uncertain success, as to warrant scarcely any real interest in their support. For utility purposes, they are just as appropriate as the Grey.



ENGLISH

The English Rabbit

This is a "made" rabbit by English fanciers, and among them has many staunch admirers. It can not lay claim to superior merit over any other variety beyond the singular markings that characterize it, and correctly bred, these are quite beautiful and odd.

The breeding of English rabbits is always surrounded with considerable uncertainty, and in no variety is the necessity for reliability of strain emphasized as perhaps in this. Lately, also, some slight modification in their Standard markings have been made that do not by any means simplify breeding.

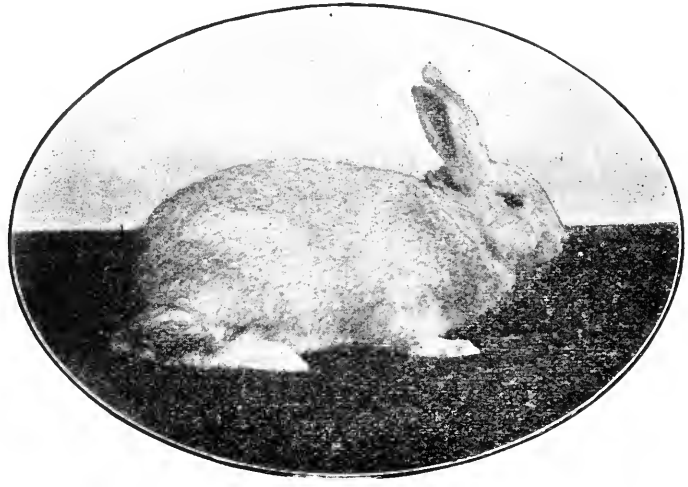
Persistent inbreeding is the more likely road to success toward characteristic points, and as our English friends invariably do, they follow it with a vengeance.

The peculiar markings which typically identify this variety are known as "herring bone" and "chain"—the former from shoulder along the entire back, and the latter along sides, ending on both shanks. Ears are solid black, and the eyes are also surrounded by a solid circle. "Butterfly" nose is considered by many as important a point as that relating to ears and feet.

There are few specimens in this country, and while a handsome rabbit as a novelty that interests the fancier after such points, I doubt if it will at any time receive palpable recognition here. I would like to see it better recognized.

Standard

	Points
Head Markings:—	
Perfect butterfly smut,	15
Circle around the eye,	8
Eye spot, clear from eye circle,	6
Eye, clear and bold,	3
Ears, neat, and free from white, not over 4 inches long,	5
Body Markings:—	
Neat saddle, herring-boned in any distinct color,	10
Sides of body to be nicely broken up in small patches, not to catch saddle markings,	12
Chain markings, even as possible on each side,	12
Leg Markings:—	
One distinct spot on each leg Fore leg, ... 6 Hind leg, ... 2	8
Belly spots, should be six,	6
Color,	5
Size and shape, 6 to 8 pounds,	5
Condition, good coat, not baggy,	5
	100



POLISH

The Polish

This is the "White rabbit of Easter," and when bred to Standard qualifications, is an exceptionally handsome variety.

It is pure white over all, has pink eyes, and in physical outlines closely resembles the Himalayan (without the dark points.) In shape it is neat, and not by any means pudgy, and has little in common with the white rabbits one sees running about yards, kept in filthy small boxes by children, and reared mostly for Easter occasion. Very few of these are Polish. With its solid whiteness that gives continuity to outline, there is apparent all the while something striking in the spry and bold appearance to the animal, and quite typically accentuated in the inquisitive pink eye. When on the alert there is a characteristic grace that removes all compactness out of the body, with the result of real beauty in outlines.

Its fur is of fine quality, short, close to the body, smooth and of silky texture. Ears are short, well set on, thin, and finely covered with fur, the latter point being good evidence of thorough breeding.

Because of their immaculate whiteness—and, by the way, there must be no evidence of brassiness in the coat —Polish must be bred in clean hutches, so constructed as to prevent direct sunlight into them.

There are no rules of special importance for mating other than the male and female should be well matched as to quality of fur, ear finishing, and perfect health. Any evidence of brassiness must also be avoided, a caution quite essential when new specimens are purchased.

Standard for Polish

	Points
Shape,	25
Quality of fur,	25
Purity of color,	15
Ears,	15
Eyes,	10
Condition,	10
	100

Black and Tan

This beautiful and interesting variety has but few admirers in this country. It is essentially an English product, and is supposed to have its origin in the cross of a domestic with the wild rabbit (not Hare) of England.

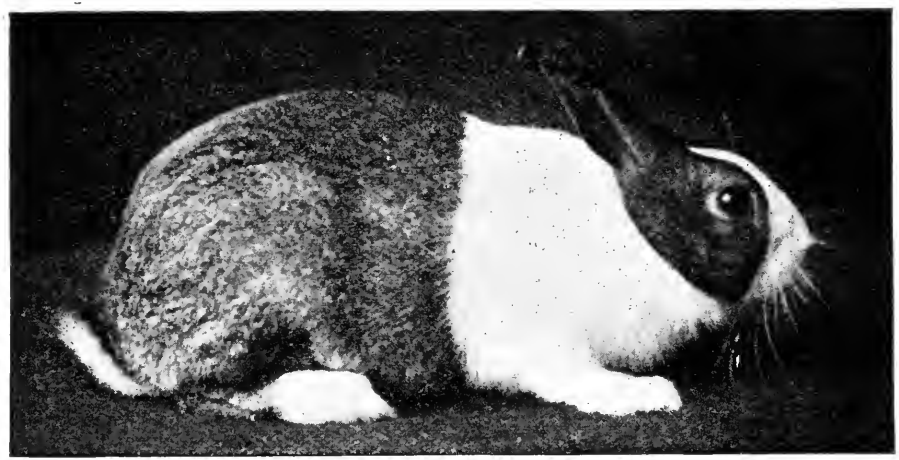
In shape, and to an extent in markings, it has considerable identity with the Dutch. The points are, of course, Black and Tan, each color distinct for the parts to which they are attributed, and must be free from alien splotches. Tan must be of a deep and dense color distributed as follows:—front, sides, feet, and hind legs, jowls and face. Ears are small, and the eyes very bold, after the instinct of wild rabbits.

Standard

		Points
	Tan, deep and rich,	15
	Black, dense,	10
Distribution of Tan	Triangle, 5	
	Hind feet, 10	
	Fore feet, 5	
	Chest and Flank, 5	
	Nose, Eyes and Jowls, 5	
	Ears, in and outside margins, 5	
	Black saddle, no ticking, 5	40
	Ears, short and black,	10
	Shape, that of Dutch,	10
	Eye,	5
	Condition,	10
		100

BLUE and TAN, is identical with the above, blue taking the place of black.

Weight of both varieties, 4½ to 5 pounds.



BLACK AND TAN

The Havana Rabbit

This is one of the very latest varieties and was first introduced as an exhibition specimen into England, in 1910. The correct color is dark brown to dark chestnut brown and blood red brown changing with the varying light. From Holland, Havanas have been sold to go to France, Switzerland, Germany, and quite a few have found their way into the United States. In France they appear to have been crossed with the Belgium hares, the color of these specimens being light tan brown, and the frame and ears are consequently much larger than in the original variety. The pelts are of considerable commercial value as an imitation beaver. Furriers require a rough, longish coat, and the Dutch variety appears to be the one most bred for this purpose. Havanas are strong and hardy and easily reared in outside hutches of ordinary dimensions. The show type that appears to be superior is the smaller, neat, short coated variety. The larger ones often exhibit a dewlap and are somewhat coarse and awkward looking. The eye is deep brown, changing to ruby and quite a feature of the variety whose most pronounced fault after the variation in color, appears to be a preponderance of white hairs in body and ears. The general appearance of the Havana is somewhat similar to the Imperial, with a decided blue cast to be seen on the belly and thighs. There are wonderful possibilities in the Havana and we look forward to them becoming great favorites in the United States.

Standard of Points

	Points
Color—A rich, bright brown all over, with undercoat of pale grey,	30
Shape and Size—Exceedingly fine and elegant, somewhat like the Black-and-Tan. Head and neck, medium. Weight, when full grown, not to exceed 5½ lbs.,	30
Ears—Four inches long, fine in substance, small, straight and carried upright,	10
Feet—Very slender and straight, with brown toe nails,	10
Eyes—Large, the color of the fur, showing a red light in the pupil, yet having a soft and gentle expression,	5
Coat—Short, fine and silky,	10
Condition,	5
	100

The Imperial Rabbit

The ideal Imperial may be described as follows: Shape and size, similar to that of a Belgian buck, but shorter in limb and weighing, when full grown, from 6 lbs. to 7 lbs. Color dark blue, of one even shade throughout. Fur, soft and bright, and rather longer than in the short haired varieties. Head, narrow and tapering, the eyes being long, bright, and deep blue in color. The ears should be about 4½ inches long, round at the tips, carried erect, and set rather closely together. The commonest faults are white hairs intermixed with the blue, rusty color, brown eyes, and bars of a lighter or darker color on feet.

Standard of Points

Shape and size,	25
Head,	10
Ears,	5
Eyes,	15
Color,	25
Coat,	15
Feet,	5
	100

Selfs

It was not my intention to touch on Selfs and yet the book would scarcely be complete without some reference to the endeavors being put forth at present to popularize Self-Blacks and Blues. The production of such varieties presents little difficulty in the matter of color, and all that is required to be done is to reduce size and shape to the standard governing the Polish or White Self Rabbit.

Breeders of these new varieties which give every proof of rapidly becoming popular are obtaining them by different methods. Blacks are being bred by mating dark silver greys and the common wild rabbit, caught when young and tamed, and from Polish and Silver greys. Both Self-Blacks and Blues are common enough in litters of tan and English, and this presents an easy method of obtaining stock. Self-English are, however, much too strong in type, and therefore not the best means of securing the desired end. The first method of producing Blacks is the best, and for Blues the Self-Blues often bred in a litter of tans is equally useful.

No standard of points has been drawn up, as yet. The only guide to breeders is the standard for Polish. Neatness, shortness of ears and coat, combined with purity of color, are the points to aim for, and the rabbits when produced are to be of the "bantam" variety. There is no doubt about the success of the newest of new varieties, providing the Polish type is adhered to, and it is safe to predict a successful future for Selfs.

The Belgian Hare

Introductory

AS alluded in a former chapter what I shall remark concerning methods of rearing, and the "keeping" of Belgians in general, can be applied to all varieties heretofore mentioned.

There is no essential difference in housing, cleanliness, feeding, and practical attention other than the salient points specified with each variety. The general principles for mating, breeding, the matter of pedigree records, and bringing up along intelligent lines, apply virtually alike in all.

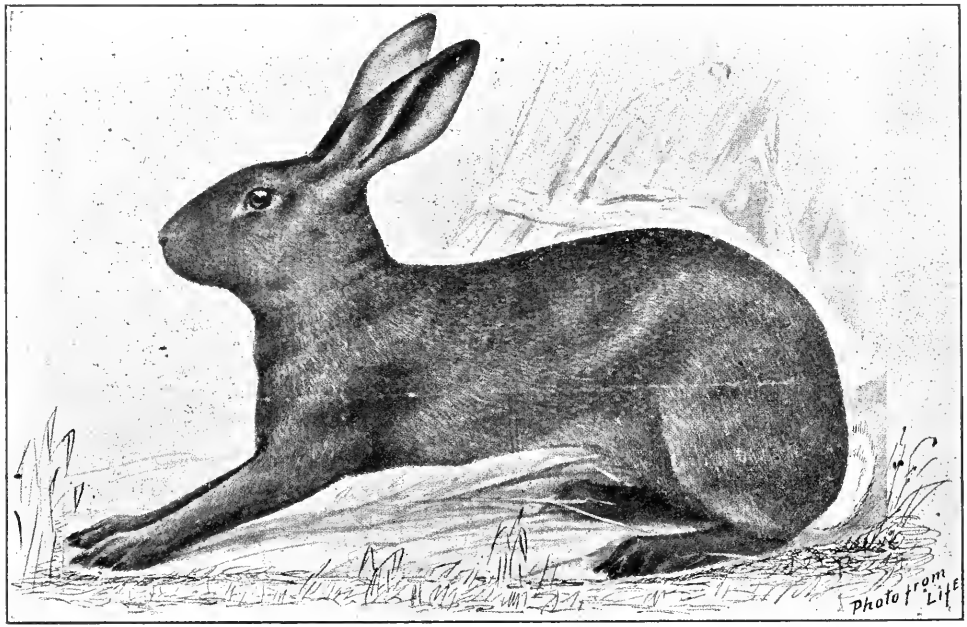
Of all the varieties of domestic rabbits, the Belgian Hare has maintained highest popularity. This is due largely to its many excellent qualities in all respects, and correctly bred offers to both fancier and utility breeder the widest scope for satisfaction and usefulness. And bred, also, in harmony with Standard characteristics, there is about it a grace and beauty in both shape and color that is not found in any other variety.

Origin

THERE is no positive information available as to correct origin of the Belgian Hare. Its name would have one naturally infer that it originated in Belgium, but I am not aware that it was by Belgian breeders ever designated by the subjoined term Hare, unless in later years.

An English writer says, "The Belgian Hare is so called from its resemblance to our English Hare, and from its Belgian origin. It has, however, no blood relationship or affinity to **lepus timidus** (common Hare,) but is to all intents and purposes, a rabbit." Technically, then the Belgian is named Hare by courtesy, and is a rabbit in fact, the English wild Hare being the pattern that has stood for fanciers of that country as an ideal toward which they have directed their breeding since its introduction from Belgium. With all this idealism, however, the Belgian will never be an exact likeness of its prototype, for without the admixture of blood from the latter there can be no more than a similarity.

Belgian breeders claim, that what is now the up-bred Belgian Hare was originated by them from a cross of the wild Hare indigenous to that country, and their common rabbit. This assertion, though, has never been proven within my knowledge, and I doubt if it is true. If they have succeeded in mixing the blood of two distinct species of animals, it was going without the bounds of



BELGIAN HARE

zoological probabilities, and what many have subsequently attempted only with failure. There are, indeed, some features about our present Belgian that lend possibility to the claim, but when one appreciates the continual contention against development of the persistent rabbity dewlap, there is less room for belief.

Naturalists describe the wild Hare of Belgium by a "fur of dark reddish color, with white belly, and weighs from 6 to 9 pounds."

In its original type the Belgian Hare, so named, was introduced into England sometime about 1856 to 1860. It came with the name Leporine. No immediate progress was made by English fanciers, and it was not until some fifteen years later that attention was directed toward a specific type. In the last twenty years, however, much advancement was accomplished, largely accentuated by the interest aroused throughout this country.

To better appreciate the idealism toward which Belgian fanciers breed with the wild Hare as prototype, it will not be in apropos to remark a bit of natural history concerning it here:

Virtually every country has a wild Hare that is indigenous to it, and in no two countries are the species identical. That is, there is no difference in specie habits, but it is either larger or smaller, with such modification of color markings as its environment seems to demand.

America has several species, the most common of which is the "Northern Varying Hare," so named on account of accommodating its color markings, as it were, to the locality it inhabits, in the northern countries changing entirely to white during the winter months. In summer it is brown, varied with black tipped hairs, the prevailing color in the more southern countries.

Then we have the "Prairie Hare (lepus campestris,) discovered by Lewis, and is never found east of Kansas. This species is most abundant about Salt Lake, and in Utah generally. The fur is white in winter, with here and there brownish spots, while in summer it is a yellowish grey.

The "Wood Hare" (lepus sylvaticus) is a small variety, and frequently confounded with the common rabbit. It ranges from Hudson's Bay to Florida, and in physical characteristics has much in common with the wild rabbit of England.

"Trowbridge's Hare (lepus trowbridgii) is the smallest of all American species, and is found only on the Pacific coast.

The species which is indigenous to England and Scotland is perhaps the most beautiful and characteristic

of all the world over, and as previously mentioned, it is this that has been made the prototype for attainment with the domestic variety.

In natural history the Hare is described in the following language: "The common Hare is known from the rabbit by the redder hue of its fur, the great proportionate length of its black-tipped ears, which are nearly an inch longer than the head; by its very long hind legs, and its large prominent eyes. When full grown it weighs on the average about 8 or 9 pounds, and sometimes even 12 and 13. In total length it rather exceeds two feet, the tail being about three inches long. The color is greyish-brown on the upper portions of the body, mixed with a dash of yellow; the abdomen is white, and the neck and breast yellowish-white. The tail is black on the upper surface and white underneath." This quotation is rather broad, and no doubt meant to be general for the Hare species, while that native to England (the prototype of the Belgian Hare) is somewhat more pronounced, the animal being rather longer and consequently more racy.

The English wild Hare is typically "built" with long, thin fore legs, rather full chest nicely tapered into an upward trend of the belly that ends in a racy tuck-up at the flank, and the latter fortified by a pair of strong-shanked thighs of powerful propelling muscular action in the well-formed, reachy hind legs. Color that of the fox in full "bloom," a rich tinge of old gold, and the back from shoulder to tail tipped with beautiful ticking "like a wavy field of grass in summer." Ears erect, and "foxy" in attention and color, with pronounced black points. Head rather broad across the skull, short, strong, and a bit thick, with a "pop eye" that stands out bold and alert, quick and nervous as if taking in all surroundings at once.

The wild Hare will invariably bring forth its young in a nest (called a **form**) built on top of the ground, while the rabbit will "make a hole" (called a **burrow**) in the ground, line it with fur pulled from the mother's body, and have a litter of 4 to a dozen. The mother Hare will rarely have more than 4, and more frequently but 2 and 3.

Another differing feature of the Hare from the rabbit, it is claimed, is that the former brings forth its young with the body covered with fine hair, and the eyes open, while the latter are born immature, uncovered by fur, and the eyes closed for ten days. I can not verify this assertion concerning the Hare leverets out of personal observation; but from the fact that the Hare and Rabbit is both of the genus **rodentiae**, which are all night for-

agers and born with eyes closed, I am at a loss to reconcile this particular characteristic.

Distinctly, all Belgian Hares of consequence bred in this country are of foreign origin, and with but few exceptions, direct descendants of stock imported from England. What specimens came to America from Belgium and Germany are as different from the English type as a Percheron is from the Kentucky race-horse, and there is little about these that appeals to the classic fancier.

One sees occasional advertisements of "Grey," "White," and "Black" Belgians. There are none such, and the name is more a whimsical misnomer for an uncertain cross-bred rabbit or the result of self-colored sports.

Physical Characteristics

WHEN the expert horseman wishes to purchase a speedy driving animal, he first inquires where, and from what stock it is bred. It must, first of all, have an ancestry of recognized and demonstrated quality. This implies health, speed, and durability. Then he looks the horse over from every point of view—front, sides, behind, close and afar. He does this with the animal in pose and when in action, and notes every contour of head, body, and limbs. He wants a driving "machine" that has all its physical parts harmoniously and scientifically adjusted for easy action that makes time with the least effort. Shape of head, expression conveyed by set of ears and attention in eyes, carriage of tail, shape of body with taper toward flank, strong shank action beneath a well-formed back—all these characteristics make for qualities desired. And so with the thoroughbred Belgian Hare.

In speaking of its physical characteristics we have in mind all that one sees in outline, contour, shape, size, length of limbs, ears, eyes, expression, and color markings. It is a picture of type that aims for an ideal, and as before mentioned, since this ideal is largely made up in the physical characteristics of the wild Hare, it is necessary in breeding the domestic to constantly keep this before us.

No one man in the Fancy the world over has done more toward bringing the Belgian Hare to its present physical status than Mr. John Noble, of England. His high abilities as a scientific breeder, fine perception of physical points, and all requirements that make for success, are only accentuated by the rare qualities of the man as shown by his gentlemanly courtesy toward every one, that I am willing to concede him all the honor so meritoriously but modestly earned. Mr. Noble has "made" the Belgian what it is more than any one else, and this is what he says about the making:

"I have made a special effort to develop the shape of the Belgian Hare ever since I decided to make this variety my specialty, and have succeeded in breeding some of the best ever bred. Most fanciers know that we wish to breed to represent the wild Hare in general style. You will therefore select your specimen with fore legs as straight and long as possible, and the hind feet long and fine also; ears about five inches long, and carried similar to the wild Hare; head (rather) long. The neck must fall low from the ears, with a graceful curve along the back, and a gradual rise to the hind quarters, which should be well rounded—not chopped off abruptly.

This specimen of which I have drawn the outlines is to a very large extent idealistic. A successful breeder is an idealist. You must always have pictured in your mind's eye what you wish to see realized. You will not be satisfied with your realization, for as your practical efforts advance, your ideal keeps advancing. Consequently you are always living in a state of hope."

Another breeder of note, Mr. Wilkins, has the following to say of the physical characteristics that to his mind constitute a typical Belgian:

"The body of a Belgian should be long and fine in build; the forepart should not be heavy, but fine and graceful; the back nicely arched and rounded from shoulder to tail; the haunches round, not choppy; fore legs should be long, fine, and well set on; that is to say, they should be so placed as to lift the forepart of the body well from the ground and let plenty of daylight under it. The head of a Belgian should be long and lean, with prominent eyes full of luster. The ears should be well set on the head, carried erect when in motion, and laid on the shoulder when in repose. They should not be too short, as shortness of ear causes a rabbity appearance. The correct length is five inches. The neck should be fairly long and slim in proportion to the body. The bones of the hind legs should be long and lean, not thick and chumpy. Tail should be straight and in no ways curled. The whole properties of the makeup of a Belgian should combine to present to the eye, as the wild Hare does, a look of gracefulness and activity. A thick, choppy, angular Belgian is an abomination."

This latter picture is even more idealistic than the one drawn by Mr. Noble, and is decidedly more away from the real wild Hare type, notably its head and neck. However, the possibilities of these pictures are exceedingly fascinating, and to attain them a real art.

It will be noted that in the above descriptions no mention is made of color characteristic—a feature that to many fanciers appears of almost greater significance, apparently, than that of shape; so that one might be led to think from this silence that color markings are of inferior importance. As previously remarked, color should have its share of considerate attention, but never made to supersede shape. Nature is fickle with color identity, as shown in the ever changing variableness of the wild Hare according to season and environment

The wild Hare is the race-horse of the native rabbit family, and the Belgian that of the domestic bred. This point should be constantly in the fancier's mind when breeding for quality; so that by all science available in the breeding art he keep away from bulkiness, bigness, and general rabbity outlines, just as the breeder of speed-horses keeps away from the common farm product.

But this is not to convey the inference that raciness of shape means necessarily a small animal. Standard weight is 8 pounds, and this is not by any means difficult when one gets length rather than compactness. Leave the big, compact stock to the utility breeder, for this sort should never be specified as fancy, but made a distinct class by itself after the German and Belgian type. It is the trade in stock of this latter "make" that has done breeding for classic Belgians great harm, and it would not be injudicious to create two classes with a view of opening a channel for show recognition to breeders whose ideas for size outweigh those of raciness. This would place the utility rabbit on a basis of equal breeding for its particular qualities with that of the classic type. Possibly, too, the advisability of distinguishing names for clearer differentiations of the two types would not be amiss.

I shall add here, that associated with an understanding of physical characteristics there is frequently a misinterpretation of **type** for **shape**, so will insert what Mr. Ziegler, a leading American fancier and judge, entertains as a proper definition of the former:

> "Type is the aggregate of characteristic qualities. A Belgian Hare true in shape might be a very poor type, and again a specimen perfect in color may be a poor type. It takes good color and good shape to be a good type. A specimen that scores high according to Standard requirements is a good type, and one that would score 100 in shape, size color, and quality would be perfect type **(est inventus.)** Quite often the word "type" is used when only shape is meant. The shape of the Belgian adds to the make-up of Belgian type, but by no means will shape alone determine its type."

I will leave the interpretation of this quotation to each reader individually, and with it the inference that a show specimen of any species of exhibit judged by the score-card system, is subject to the judge's individual interpretations of score-card points; and that it is as rare as snow on Fourth of July for two judges unknown of each other to aggregate an identical average for the same specimen—a fact that demonstrates something "out of joint" with either the judge or the Standard, most likely the latter. So long as the English and American Standard remain as at present, comparison judging will be nearest correct and satisfactory.

With regard to type, I am personally not inclined that color takes a leading part, and has little more to do than a mark of identification possibly; nor does it appear to me logical that "a Belgian Hare true in shape might be a very poor type."

Dewlap

BY visitor and novice the question has often been put to me—"What is that lump under the chin?" "Why is it there," and by the fancier and breeder, "How are we to get rid of it, since the Standard qualifiies 'no dewlap?'"

The dewlap exists by reason of the Belgian's rabbit origin, and to get rid of it has been an effort of all good breeders from the first; and while its riddance is not yet a complete success, I am glad to note that we are gradually "getting there" more and more.

Technically, the presence of a limited dewlap does not disqualify in the show-room under a competent judge, but specimens with pronounced accumulation of a "lump" should be condemned both as breeders and exhibits, since it appears that the tendency to reproduce this objectionable point is quite prone; and all the more so when the least evidence of it is apparent in males. For purposes of Fancy, therefore, no buck should be used as a stock-getter that has not a clean, well outlined neck, and whose progenitors have been likewise so.

Anatomically, the dewlap is neither fat nor gland, but rather a combination of both, with an added affinity to enlarge in harmony with the functions of reproduction. It is virtually an extension of the milk glands in modified form, and is greatly accentuated by frequent gestation. To out-breed it means attention to the selection of proper stock, and to judicious mating with regard to frequency and age. What has been accomplished thus far is largely the result of junior matings, or matings with one side under age maturity, preferably the doe. In other words, there must be a doe, at least, a physio-

logical condition of sub-normal development in the reproductive sphere, with consequent stock of finer physical proportions.

That objection to the dewlap should exist, at least to a limited degree, as a factor entering into classic breeding of Belgians, does not necessarily follow; but since we aim to reproduce them as near true Hare type as possible, its elimination becomes all the more necessary, for the more of it we have, the less Hare quality we possess.

Personally, I have never seen a matron doe without any evidence of it at all, however slight, and I have seen many as well as bred of some of the best specimens yet produced; but if one can breed up to a standard of no evidence in junior does, and not much in matrons, we can be well satisfied when all other characteristics come within high quality. Success, if at all attainable, lies in a carefully sustained strain.

Color

ASSOCIATED with breeding the Belgian, there has continually been more or less diversity of opinion as to what constitutes a correct color for it. In fact, fanciers have taken sides over the issue, and in many instances came near the point of acrimony about it. "The flame is not worth the candle" compared with the value of physical characteristics, wherein lies the true Hare picture.

Some advocate the deeper tinted shade styled by them "mahogany red," while others stand by the now popularized tinge specified as "golden tan." As will be seen, there is scarcely a decided opinion on any shade.

Standard requirement calls for "rufous red." Why this indecisive term was made descriptive for color I am unable to say; and it is quite certain that the popular color now in vogue is, technically, not **rufous**. That the term is confusing is made apparent from various expressions vouch-safed by those trying to define it with specific wording, as "golden tan," "golden chestnut," "chestnut tan," "mahogany red," "chestnut brown," "brownish red," etc. One customer wrote me he desired a doe with "dark red" color, and another wanted one "cinnamon brown."

The term **rufous** is derived from the latin root **rubro**, meaning **red**. Dictionaries define it as "a dull red tinged with brown." **Tan** nowhere enters into any definition of it; though to define the latter perhaps aids in understanding its association with the former.

Tan is defined as "yellowish brown," or "to make brown by exposure to the rays of the sun." This would seem to imply what is to be conveyed by "golden tan."

Breeding for Color

Bear in mind from the outset, that to obtain color, even approaching correctness, is the most difficult feature associated with breeding high class hares. One can breed a thousand specimens, many among them of excellent shape and good looks in general, yet not one in the lot that comes up to finished color points. Breeding for color is the **ignis fatuus** ever present with rearing Standard Belgians—"now you have it, and now you don't"—but there certainly is a large pleasure in "trying to catch the thing."

The first factor toward securing substantial color—and it is the substantial kind one wants—lies in the selection of breeding stock that is known to throw reliable depth of true tan. With this trait thoroughly established in a well built strain, many disappointments are already conquered. It will cost a bit more to start out with breeding stock of reliable reputation, but to secure specimens whose blood carry the science of years spent in its production, will place one a long ways on the road that has been hard traveling for the breeder before, and obviate many risks, disappointments, and other troubles that come with inferior stock. I can fortify this assertion with the assurance that in the past eight years not a single specimen marked white on feet or shanks has shown itself among my flock, nor a one without palpable shade of tan on the belly fur.

As remarked in a former paragraph, the popular color tinge at present most prized by many good fanciers, and toward which the Fancy in general has been working since the past ten years, is "golden tan," so named. A good specimen is quite handsome, and to breed for this tinge considerable of a fascination; but I question the lasting qualities on account of its proneness to turn lighter with each successive generation. Unless one maintains a constant infusion of blood from darker tans there will eventually be too much white.

A Fancy, I dare say, has somewhat the elements of society—an institution of changing moods—so that the color for Belgians today is by conservative fanciers classed more as a fashion than a point of lasting quality.

Whatever point one breeds for, keep constantly in mind that the power of transmitting it lies strongest in the procreative energy of a properly selected male. This is as true of color as of all other physical characteristics. The female is more a medium **through** which a species is propagated than by it. Now and again one comes across what I shall term a masculine female, or a feminine male. if such are paired together, the stronger characteristic

points will have their imprint from the former; but such matings are undesirable.

To breed for color, therefore, seek the tinge that is desired in a carefully chosen buck. Study and settle in mind just what that tinge shall be, then select a male a least bit darker and deeper; for it is better to breed with room for "back-breeding," than to select too light a tinge from the outset. If one decide on "golden tan," mate such a buck with a doe of the "chestnut tan" shade, and in both give particular attention to depth of undercolor. It is this latter that makes for permanency for the future. If "chestnut tan" is to be the tinge, have the doe a trifle lighter than the buck.

Once one has carefully built up a hardy, reliable strain from vigorous progenitors, the task to bring just what is desired will not be so difficult. But permit me to assure my reader, that haphazard matings with haphazard selected stock spells failure in all the salient points that make for interest in scientific breeding. It matters little whether these points imply color or physical characteristics, if one desires to build, the foundation must be philosophically right. There can be no true interest or enthusiasm possible out of a makeshift source, and if these principles are not included in the makeup of prospective fanciers, they had better breed for market from the start.

Personally, I admire "golden tan" color on a Belgian; but for permanent quality and persistent reliability, "chestnut tan" appeals to me as most desirable, and when seen in a specimen of rich bloom, there is something about it that speaks for dignity, quality, and substance of breeding far surpassing the "flashy red" which needs continual nursing.

Speaking of "golden tan" in his book Ambrose says, "one must remember that such is the most difficult color to produce and maintain, and that it can not be bred successfully without a judicious mixture of the deeper colored ones." Then a few lines farther on the same author says of the latter, "some, I know, pin their faith yet on the old chocolate shade, but these, when compared to a correct golden tan, appear absolutely shabby in the eyes of those who admire beauty for beauty's sake alone."

The inconsistency in these quoted lines lies in the fact that "deeper colored ones" are an absolute necessity to the existence of "golden tans," and to breed the Belgian as a color object of "beauty for beauty's sake alone," is superceding the physical characteristics that make it a distinct species with a fashionable fad.

Wilkins, in his excellent description of what he considers ideal Hare characteristics, does not there associate color as one of them, yet in another part of his book says

that "color in the Belgian is of first importance—it is the cardinal point." He too, like Ambrose, is a worshipper at the shrine of fashion. Indeed, the craze for "yellow" has become such a fad, that to placate a warning for the future welfare of Belgians is necessary. It has come to a pass that what is a prize winning specimen in the 4 to 8 months classes, and lauded as a wonder, will receive scant recognition ten months hence.

When observing a Belgian Hare from a show point view one notes the colors to constitute black, white, and red, the latter being the prevailing body effect. Absolute white should be confined to the under surface of the tail alone, while that of the belly and under jaw should be tinged with rufous sufficient to give an appearance of rich yellow cream, verging into tan if possible. Such a specimen is evidence of reliable color breeding.

Heretofore, there has been no small contention with points of white in the form of bars across the front feet, and streaks along inside of hind legs, often spreading over the top and down outside. There is no longer much trouble in this respect, owing to better fortified blood lines in well established strains. The fault was largely an outcome from admixture of "any old rabbit" by unscrupulous dealers in this country and England during the boom some fifteen years since.

What black is apparent must be distributed from shoulders along the back, gradually widening down the sides and along the haunches, ending on a line across the root of the tail. This evidence of black is known by the term

Ticking

and consists, according to one authority of "long black hairs protruding through and among the golden tan ground color, and should be crumpled and wavy, and of a jet black." Others signify that ticking is constituted of "red hair tipped with chocolate black."

In harmony with the present tinge of desired "red," the latter is nearest correct.

At this writing I have likely as near the correct "golden tan" as is possible to breed, in one of the most delicate colored bucks to be seen. Richness of bloom is superb in the light of present desired tinge. He is out of a popular imported champion, and shows all characteristics of the new "fashion." On seeing him hop about the yard, there is scarcely any indication of ticking. He appears "red all over," and fairly blazes with golden shimmer at twilight (the correct time to estimate true tinge;) but when placed in sitting posture and the hand is gently stroked over the back, ticking comes out in almost solid wavelets over the surface, and down the shanks complete.

Close examination shows the long hairs delicately tipped black—a deep chestnut black rather than jet—not more than 3-32 of an inch from their points, with the remainder of their length same hue as their shorter partners in thick profusion about.

On the other hand, in an adjoining pen is a grandson of John Noble's great African Chief, the perfection of **chestnut tan.** This specimen has not a white hair on his body except under side of tail; and while the above "golden" chap is an attraction to be admired, and would probably win over his partner, there is something substantial about this fellow that stands for unchangeableness in color of a character which one can not do without for keeping the golden ones permanent. In his way he is just as rich of bloom as the yellow one, and as a breeder far superior for reliability. Ticking is alike in both superficially observed, neither showing waviness until stroked by hand.

Personally, while I admire a heavily ticked specimen (providing "red" beneath is right,) too much black does not appeal, and few such can be found that will breed desirable rufous as associate color.

What is meant by "wavy ticking" is the black-tipped hairs so placed in rather regular splotches as to resemble the effect of ripples on the water from a breeze.

There should be no black hairs on the breast and chest, fore legs and hind legs. A small evidence on the head is admissible.

Aside from the above references to distribution of white and black, the remainder of the animal should be "red," otherwise "golden tan" or "chestnut tan," according to the fancy of the breeder.

As a digression, I will insert a bit of relaxation right here: While sitting at my desk writing the above anent color, I was called out in the yard on a small matter of interest to the children. This attended to, my topic came in mind, and I walked over to the hutches with the idea of seeing how my pets came up to standard about color points I was trying to tell my readers in these lines. The day was more than warm (only 96 in the shade,) and I found 8 brood does on the floors all in like position flat on the belly, with fore and hind legs stretched out forward and back. They looked distressed of course, but the picture was a real pleasure; for here were 8, and 7 of them as like one another in "color trimmings" as so many peas in a pod. Front feet and legs, breast, neck and ears, sides, and hind feet and legs, so uniform in chestnut tan as to make one believe all came from one parent. And those babies with several of them? Well, they were some Belgians in prospective, and I was more than ever impressed with the certainty of what I had on previous occasions

advocated, that to attain best results in all particulars, one must mate his Hares in the season when Nature intended they should.

Kindly bear in mind, too, that in using my stock as illustrative to these remarks, I am not doing so with any advertising motive. I breed out of pure pleasure and love for the little pets, and for best possible quality entirely as a recreative hobby; and to illustrate from it is mere convenience. I have few to sell at any time, very limited room to breed Hares, and such poor health as to absolutely qualify my efforts. But the pleasure derived from their keeping is by all odds the keenest enjoyment I got out of any recreation in the past 40 years. But to return.

Color points as influenced by age are often a perplexing feature to those not sufficiently long familiar with the breeding of Belgians. They often wonder why youngsters show so light in the first 8 weeks—a fact apparent in all those bred from light tinged stock. This, however, will all change with normal conditions of growth, and if the strain is a reliable one as to evenness of tan, there need scarcely be any fear of white markings.

Gradually as age advances, color will also, until from 6 to 8 months the permanent junior points are complete. In England, where shows are held the year round, growth with its accompanying color development is often attained at an age of 4 months by a process of forced feeding.

Permanent senior color, however, invariably follows the molt of second summer, and if the tan is of good strain foundation, intensity, with additional ticking results. To illustrate this point: A year since a young fancier friend sent a junior doe, then 10 months old, to be mated to my imported buck. This doe was exceedingly fine in physical characteristics, but quite light "yellow," considerable grey on the haunches, with very little but rather even ticking. On first seeing her I wondered if my darkest tan buck could sufficiently modify the light tan as to produce even moderate intensity; but on seeing her pedigree I knew just what to do. I knew, also, that with the following molt she would greatly improve. This spring (1911) she came back for a second mating, and I was surprised at the improved tinge, added ticking, and almost total disappearance of grey—one of the handsomest brood specimens it was ever my pleasure to see. The mating proved beautifully successful, and I am proud to own one of her sons as a permanent fixture to my rabbitry.

As already stated, procreative energy is strongest in the male. In the sire are supposed to lie hidden the qualities we wish to see brought out as physical characteristics in his offspring. These, in the Belgian, include color as

well as contour of body points, so that whatever permanency to them is to be established must be sought for preferably in the sire line. At the same time I would not have you lose sight of what possibilities can obtain through the female as a medium for transmitting specie characteristics; for since Belgians are essentially a "made" creature, both lines become important. The female, however, should be studied from her sire side rather than that of her dam.

Many fanciers mate by selecting the male for color and the female for shape and size; others reverse this selection. It is an issue that each fancier can apply as a matter of experiment toward an objective point; but unless both sexes are chosen with due regard for all characteristics, a much larger degree of obvious disappointments will have to be constantly combated, with the risk of failure in the end.

Red, designated as rufous, is therefore what constitutes color for all those parts on the Belgian not specified by white and black—the latter entirely as ticking. This as already described, varies from bright to dark, and is qualified by its tinge as golden and chestnut, with tan as the basic element. The deeper down into the fur this latter extends, the more valuable the specimen in point of Fancy, and if extending to the skin altogether is evidence of extra quality.

There is continually some trouble to secure correct color on the ears of a Belgian; that is, so these appendages harmonize on their superior surface with that of the ground color on the body. Often, also, the ears are too bare of fine hairs, almost naked, indeed, and then either too light or too brownish. They should be very finely covered with exceeding short, red hairs, a nice continuation out of the head covering as far up toward the black-tipped point as possible.

Another failing that seems to be the result of fashion breeding, is whitish-tipped toes—not bars—but a soft cushion of pale hairs where the nails set in. This is not a very evident failing, but by oversight in mating is liable to become objectionably pronounced.

Now and then one sees a specimen, usually a bright red chap, with white hairs mingled throughout its body coat. Concerning this they make a loud noise over in the Old Country, and Ambrose says it is a "very serious defect which should at all costs be avoided." They are willing to admit the "defect" as a result of in-breeding, yet advocate the latter with a tenacity bordering on the pugnacious. Best of all, use no specimens whose coats is distinctly marred by alien hairs of white; but at the same time do not throw aside otherwise good ones when such hairs are "far and between," for we must remember that

alien white hairs are quite frequently the effect of injury to hair follicles from a scratch with the claw, a bump, or bite during a scrap.

Furthermore, our friends "across the pond" are decidedly finicky about the effect of sunlight as a bleacher to the red. That persistent exposure to sun rays will tan is well understood, but that Belgians ought to be reared devoid of this invigorating influence on this account, is begging an issue; and that moderate exposure will be a detriment is also open to question. As an experiment I placed one of the bright red chaps in an open, uncovered yard, with no protection other than several boxes against rain. The sun shines in this yard up to 2 P. M., yet this fellow shows no bleaching after a 4 month's test, with the temperature above 94 for a week at a time. However, as a matter of comfort I have my hutches roofed over for protection against both heat and rain, since wet is a whole lot more undesirable than heat or cold.

A serious mistake often made that eventually proves detrimental to color effect, is mating specimens before sufficiently matured, or before adult bloom is fully attained so as one may know what to expect. It is a physiological certainty, that while the reproductive sphere can be responsive to its functions at a comparatively early age, its fruit thus early produced can not attain that permanency in physiological characteristics which come from stamina out of a mature body. To come within all physical expectations, then, it is well to permit the reproductive organs as much time for organic functional perfection as the rest of the body; and remember, that once the reproductive sphere is drawn on for functional duty, virtually all life of the being concentrates in that direction, and at the expense of every fiber in it.

Breeding for Shape

Breeding for Shape Mating

A careful study of the topic that relates to Physical Characteristics, along with the immediate preceding one about color points, will give practically all essentials that enter into breeding for both shape and color. Analyze the former intelligently, and apply the latter in connection so near as it can possibly be adapted. Use judgment and common sense with what science of breeding one has available. Adjust inferior points in one with superior ones in the other, and remember continually that from the sire emanate the blood line qualities for which we aim.

I have no doubt about not a few fanciers taking issue with my views concerning my contention for superiority in the sire. I have not the least objection, and entirely appreciate that the nearest approach to absolute fact is derived from deductions out of our differences. Yet I must write as I believe, out of actual experience and considerable research; and is it not a fact that in Hares, as in all other stock breeding efforts, the sire has first place whenever there is inquiry after new blood lines?

But Ambrose says, "Success is, to my mind, much more readily secured through the does than through the sires. It is the mothers which perpetuate the main characteristics, and yet every one appears to crave so much for sires." The universal law of propagation does not justify the idea advanced in this quotation, nor can it be substantiated unless by instances that are exceptions to general rules. Which is not saying, however, that any sort of mongrel female will reproduce quality stock from a high class sire. Such an inference is not thought of in these remarks, for I am speaking of stock that is supposed thoroughbred on both sides.

There is no question that our present fashionable Belgian Hares are largely the result of breeding from young animals. Such a method conduces to fineness in physical features, and has been a leading factor, no doubt, toward getting the prominence of an objectionable dewlap greatly decreased. I doubt not, though, but that all so far accomplished has been done at considerable expense of constitutional stamina; and whether we are justified to make the sacrifice merely for the sake of a less useful yet more beautiful animal, I leave for each one's individual analysis.

A few years since I wrote one of our leading fanciers for his opinion about mating. This is his reply: "In mating for results I select the doe for shape and the buck for color. To eliminate defects I mate a doe strong in sections of shape to a buck strong in color. I do this with two pairs suited to each other, then select a buck of the one to mate with a doe of the other, and find my efforts have been rewarded.' Evidently his ideas run parallel with those of Ambrose.

Another fancier of equal prestige, and who has made it considerable of a specialty to breed for shape, lays all success to the merits of a prominent sire strain imported nearly twenty years since; and I will qualify this by quoting what Wilkins believes is a sire's part in the mating: "The buck plays such an important part in the characteristics of the young in all points, and particularly in color, style, shape, fineness of bone, and head properties, that it is absolutely necessary he must be good in these points." It is from differences like these quoted that we must

acquire our experience; for after all opinions are weighed, there is but one sensible course—use the best available specimens "on both sides of the family."

My personal experience has been entirely from well chosen sire lines, and I am quite satisfied with it. I am convinced it is the correct course.

Under the topic Physical Characteristics will be seen described what is demanded as correct shape. Study that carefully, and frame the picture in a prominent section of the mind, then compare with the stock intended for mating, and pair up as close to all points of quality as possible, always with the side of preponderance on that of the male.

It is often important to be as well informed with regard to defects, as with points of perfection. If anything, the former give more trouble than the latter. To one specially significant (I am not naming it a defect) I will call attention here—that of "choppy behind." This is an abrupt decline of the spinal bones from a line across the hips to the root of the tail, giving the animal, in many instances, almost an angular appearance. The nearer an unbroken arch is shown by the spinal curve from directly behind the shoulders to the root of the tail, the better will all other outlines harmonize. I doubt if this failing is much a result of strain, as it is from small quarters and consequent lack of jumping exercise.

Also avoid thick heads, lopped ears, and legs that stand distinctly in or out.

I have often been asked as to the propriety of breeding from stock that carries the tail sidewise. When specimens of high quality are otherwise available I would not use such; but if a specimen of excellent points in all other respects, with just this one failing, I should not hesitate to use it—providing the anatomy of the tail is perfect. Physical defects are always apparent at birth, so that by careful examination of youngsters, all unpromising ones can be destroyed. What will turn out as a "twisted tail" can be clearly seen before the youngster is three days old. It is an anatomical malformation due to only partially developed vertebrae, or the ligaments that hold them together. But if the miniature tail shows straight at birth, and subsequently "floats" to one or the other side, it will be a condition of habit or overgrowth, rather than a defect. I don't like a "floating tail," but when there is no physical defect, an otherwise good specimen should not be condemned on this account alone.

I have noticed that rapid growth, all the more when intensified by humid warm weather, is a contributing factor toward this failing. Likewise, inactivity enforced by small quarters.

Above all, do not mate specimens not in their full vigor. Shape will be influenced by a diseased body.

Breeding, Building Up a Strain and In-breeding

Associated with the breeding of every species of live stock there is continually present this persistent bugbear that relates to in-breeding—the theories for and against it. Inherent within one's self, no one seems to like it, yet in the regular order of breeding for specific points there appears no other way.

We all are repugnant of the idea associated with mixing blood of relations, and when it comes to pairing father with daughter, brother with sister, or son with mother, we just naturally think this is dreadful.

Regarding such matings in the human family, both Bible and Law has set a ban against it, yet it could not have been otherwise than from such relationship that every species of living thing emanated, if we are to believe the story of Creation, the Flood, of doddering old Lot, and other instances of sacred and profane history. But the subject is one that can be made a volume by itself, so that I shall limit myself consevatively.

One primary factor is, to what extent will psychological influence bear on sex combination. With regard to the human species, science has evolved the knowledge of relationship between mind and matter, and it is believed the former can materially influence the latter; hence the social and legal ban against the mingling of related blood.

In creatures of the animal kingdom psychology is supposed to have no part, and therefore in-breeding can not influence tissue formation. Mr. Noble says, "In the lower animals there is no mental strain to take into consideration," nor can there be any knowledge among them that the remotest blood-relationship exists. I have in a number of instances observed, in dogs we'll say, that a certain endowment of memory is apparent. After considerable association, sudden separation for some period (quite long, one would think,) and subsequent coming together again, joyful recognition was manifest; but the matter of blood-relationship never seemed the least check to familiarity. Often, also, have I noted the gradual growth of a litter of kittens, baby pigs, a pair of pigeons, half a dozen puppies, a young lamb, and a "nest" of Belgians, with a view to studying the length and permanency of filial relationship and parental affection; but in every instance, so soon as the parent voluntarily "weaned" its young, there was apparent no further consideration for it than that of tolerated companionship, and often not that. In the light of these facts, Mr. Noble practically asks—"I am

still waiting to know why I should not put together any pair of rabbits, that from outward appearances, are perfectly suitable in every respect, both physically and for producing exhibition points."

Another breeder says, "I never consider blood-relationship at all, and do not hesitate to pair father with daughter, or brother with sister."

In no country, perhaps, is in-breeding made a practice in the rearing of live stock as is applied to every species of it in England. It seems an obsession, and a sensible one, mayhap, over there. Rabbits, and Belgians in particular, have been so long in-bred that Ambrose remarks concerning it, "We sometimes think we are using quite another strain, when in reality we find, on inquiry, that the stock is not far removed from those which we ourselves are depending upon for success."

I do not wish to set myself down authoritatively as individually advocating either cross-breeding, line-breeding, or in-breeding—rather as remarking of each impartially; but I am not averse to an acknowledgment, until better informed, that a careful study, associated with personal experiments, of the more recent points and developments relative the breeding of live stock, has modified my views largely in harmony with those of Dr. Schroeder, Superintendent of the U. S. Bureau of Animal Industry, who says, "I am strongly inclined to believe that the evils attributed to in-breeding have been greatly over-rated."

It is interesting to note what the U. S. Department of Agriculture is doing through its several subsidiary divisions by way of experimenting along all principal lines that relate to mating of the different species of domestic animals and fowls. Special attention is given the Mendel theory, as laid down by the monk of this name, whose work consisted entirely, it appears, in experimenting with plants. Government experts believed that the law discovered by hybridizing vegetables and flowers, would hold out with similar effect when applied to breeding live stock; and while not carried far in this direction as yet, indications point to successful results.

Briefly, the Mendel theory is that of "inheritance of ancestral traits," or plainly that of in-breeding. It embodies the principle of dominancy and recession in succeeding generations, and implies, also, that each subsequent third generation in a lineal descent is characterized by predominant physical points of merit to demerit in the ratio of three to one. That is, in a third generation there appear three "dominants" to one "recessive," and it is by mating continually out of the former that eventual perfection in thorough breeding is attained.

I have neither time or space to remark at length on the numerous scientific points involved in line—and in-

breeding, but it appears the only logical course for the attainment of specific characteristics.

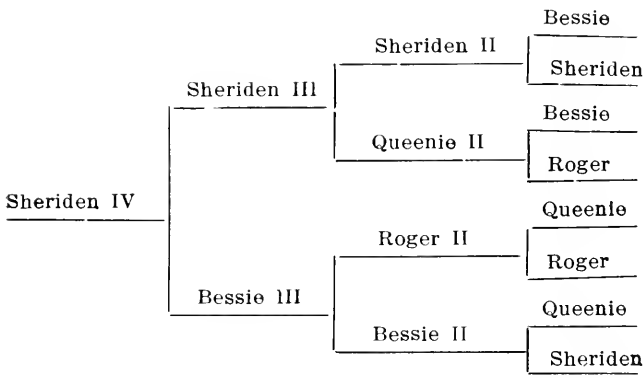
There are three forms of breeding as classified by the terms **cross-breeding, line-breeding,** and **in-breeding.** These are defined as follows:

CROSS-BREEDING, is the mating of two thoroughbred breeds of diverse species, as the Hackney and Trotting-horse, Alderney and Holstein cow, Bulldog and Hound, Belgian and Flemish or Dutch or Silver, etc. Subsequent matings of such offspring can be line- or in-bred.

LINE-BREEDING, is mating individual specimens of a breed when interruption in relationship exists by remoteness.

IN-BREEDING, is the mating of close related ones of the same species.

Line-breeding is illustrated by the subjoined pedigree diagram representing straight line descent for both sire and dam. For convenience I will name two pair by Sheriden mated to Bessie, and Roger to Queenie:



In-breeding needs no illustration, since it implies the mating of direct relations, as, father to daughter; son to mother, brother to sister; father to daughter by brother and sister; mother to son by daughter and brother, etc.

With regard to this latter form of breeding the U. S. Bureau of Animal Industry has bred brother and sister mated in sequence order down to the 10th generation, Cavies being the example, and regarding which Dr. Schroeder writes me, "We have found nothing to indicate that the intensest form of in-breeding, carried on for 9 or 10 generations, is injurious. That for the preservation and perpetuation of especially fine points, and for the establishment of new breeds through the selection of

naturally occurring mutations we are practically forced to resort to in-breeding."

It was apparent that the 9th generation in this instance was represented by as good health, vigor, and Standard points of merit, as the parent stock of the 1st; and, if anything, all points were finely accentuated. The experiment also appeared to show a predominance of the "dominant" elements over the "recessive" in every 3rd sequence.

Here is an example of absolute straight line descent without a vestige of foreign blood from the second mating on, yet no deterioration in a single element.

One factor stands out pre-eminently above all others in its relation to breeding, no matter along what line the latter is practiced—that of health, and the possibilities from heredity. One should never mate specimens containing physical defects, nor when affected with disease whose transmission is known to influence the offspring. I am not alluding to physical faults, nor to diseases that are curable by proper treatment. These will not transmit defects; but in the event of in-breeding, essentially close in-breeding, physical defects will likely be greatly accentuated, and constitutional disease all the more.

To start breeding, do not begin haphazard. Become acquainted beforehand with the salient principles involved.

The indiscriminate mixing of bloodlines without any knowledge of results, is like trying to steer a ship without a rudder. Don't pin faith on the mere assertion that "like reproduces like," for unless one knows how Nature does this, she may shoot very wide of the mark. She has immutable laws by which she works, and reproduces defects just as likely as points of merit. She dabbles intimately with the phenomena of heredity.

Study carefully the chapter that relates to physical characteristics, and apply its qualifications to both sire and dam, with their preponderance in favor of the former. This means all that is embodied in shape and color. But when purchasing, never ask for a perfect specimen; for there is none. All domestic varieties of rabbits are what they are by virtue of being "made" so, hence imperfections continuously crop out. So when buying from a reliable fancier who is a real breeder, say to what you aspire rather than just what you want; for it is not always that what appears the most ideal specimens from a show standard which will reproduce their kind in exact duplicate. The matter of genealogy must never be forgotten, nor that of dominancy for the prevailing traits. Buy from a breeder who understands the science associated with the art of propagating a species; then build up one's own strain.

Building up a strain implies a start with specimens selected to represent certain qualities, and then enlarg-

ing these by a process of development and elimination. That is, points of merit are to improve, and those of demerit bred out.

I am presuming one is starting out as a novice with the idea of occupying a position in the Fancy. In such event, as said, buy from a reliable fancier breeder whose strain has the reputation of careful building up for a number of years. See that the stock is free from constitutional disease. Select specimens that represent, at the present desire "golden tan," or yellow rufous, and those of the "chestnut tan" or real rufous. To maintain the former persistently requires the latter. Neither in itself, will breed true continuously without variation. The "golden tan" is liable to shade into lighter, while the "chestnut tan" has a tendency toward brown, with an excess of ticking; but by a careful adjustment of blood lines in the two, one can always expect desirable show specimens.

The matter of mating related specimens I leave for study by the fancier after a careful perusal of the views brought out in the foregoing remarks.

Pedigree

THIS is also a bugbear that is not a specially creditable one in the rabbit Fancy. That it is discreditable is no fault of the topic, and that contemptible fraud is practiced by falsifying the lineage of a specimen, does not prove that a record of blood lines represented by a given strain is not the right thing to maintain.

I hold that, notwithstanding all the howl sent up by those who antagonize pedigree, it is the only course for the maintenance of a true knowledge of one's stock. I have not yet observed one make a consistent argument against pedigree, and those who are noisiest in antagonism are the most earnest to know what they buy as represented in a reliable record of lineage.

That a fakir can fake is quite true; but not more so than that an honest breeder is honest. As a rule, a specimen carries inherently the qualities it possesses, and these are always palpable to the informed observer who knows what they ought to be.

By all means keep a record of every animal bred along thorough lines. Without a record of its lineage, what can be known regarding its possibilities for the future. Deductions are impossible without a recorded formula that leads to results. However, any discussion of this topic is superfluous for the reason that it is a universal rule among stock breeders of all varieties of thoroughbred domestic animals, is the sole guide to success, and if not maintained one had as well do a market business from the outset.

Standard

I believe I can best serve the interests of all breeders by reproducing both Standards,—The National Belgian Hare Club of England, and The American Revised Standard of Excellence for Belgian Hares. The English Standard is as follows:

		Points
COLOR:	Rich rufous-red (not dark smudgy color,) carried well down sides and hind quarters, and as little white under jaws as possible,...	20
SHAPE:	Body long, thin, well tucked-up flank, and well ribbed up, back slightly arched, loins well rounded, not choppy, head rather lengthy, muscular chest, tail straight, not screwed, and altogether of a racy appearance,....	20
TICKING:	Rather wavy in appearance and plentiful, ...	10
EARS:	About five inches, thin, well laced on tips, and as far down outside edges as possible, good color inside and outside, and well set on,	10
EYE:	Hazel color, large, round, bright and bold, ...	10
Legs and Feet:	Fore feet and legs long, straight, slender, well colored and free from white bars, hind feet well colored, ...	10
	Without dewlap, ...	10
SIZE:	About 8 pounds, ...	5
CONDITION:	Perfectly healthy, not fat, but flesh firm like a race-horse, and good quality of fur, ...	5
		100

COMMENT:—The above Standard, while complete in a way, is yet open to many points of inquiry, especially by the beginner; and were one to select breeding stock with absolutely no other available information, I fear there would have to be considerable guessing. There are quite some few persons who have never even seen a typical Belgian, and should such an one wish to learn what a hare was like, and have a reprint of the Standard sent him as the best guide to a knowledge of it, that person, no matter how intelligent he might be—well, imagine what he would make out of it. I say this without the least intent at reflection or sarcasm; for one cannot fail

to note a vein of indefiniteness through it all. Observe the following points in order:—

First—"Color." Can the uninformed say what rufous-red is? To most it must be entirely new; for it is never seen in print in connection with any object or other animal than the hare—at least very rarely, if at all—and it being the foremost point as to characteristic and merit, and the greatest "bone of contention," I think a careful and lucid definition would have been the correct thing.

"Carried well down the sides and hind quarters" is quite indefinite, and without proportion.

Second—"As little white under the jaw as possible." A good, typical specimen is supposed to have **no true white,** but a creamy tinge through what there is, as though the pure white had been soaked in **rufous-red** just sufficient to taint it.

Third:—"Body long." How long would a mature hare possibly span if nicely flattened in a belly posture? It would help a lot to differentiate from the "squeezed together" pudgy ones. By taking a front view along the back, how does length harmonize with the neat, narrow, gamey looking head which is obviously only "rather lengthy?" If a typical specimen weighs "about 8 pounds," all other points being in harmony, it should be exceptionally long in body from tip to tip. Isn't this logical? "Thin, well tucked-up flank, and well ribbed-up" is open to wide construction with a long body and the "back slightly arched" only. A body of this description would seem most harmonious with considerable grace in what the American Standard calls an "unbroken curve."

Fourth:—"Ticking—rather wavy," is indefinite with the **rather.** It is desired "wavy" in fact, as well as "appearance," and this **wavy appearance** is only on certain parts of the animal, we know, though the Standard don't say. For all this it might be on the sides and belly, as well as on the arched part of the saddle—all over the hare, in fact. One should have it said **just where.**

Fifth:—"Ears—about five inches"—about the correct length for a hare that weighs "about 8 pounds." This appears harmonious; but "well laced on tips" does not. The word **tip** means "the point of anything small," and a small point can not have anything of quantity upon it. Now if the "outside edges" were "well laced" **around** the tip, say one inch, or one and one-half from the point down the fore-side, the description would be definite. And the color of them—it don't say—but elsewhere is given as "a rich shade to match the body color in some degree.

Sixth:—"Fore feet and legs long." Here again one having never seen a Crystal Palace winner can not possibly say how these should harmonize with an 8 pound

specimen, and for both the feet and legs to be long, it would seem proper to signify how the two lengths are apportioned. In the chapter on Physical Characteristics some idea is given in this clause—"they should be long, fine, and well set on, so placed as to lift the forepart of the body well from the ground," which would mean something like six inches. Of the hind legs one must form a general idea as to length.

Seventh:—"Without dewlap"—which, buck, or doe, or both? There are, however, few specimens of does entirely free of it, and judges say a small dewlap is admissable. This fact should be stated, and the cut in points specified.

Eighth:—"Condition," is open to a wide range of interpretation.

The following is the American Revised Standard of Excellence for Belgian Hares. Adopted by the National Belgian Hare Club of America, June 8th, 1901.

Disqualifications

1.—Lopped or fallen ear, or ears.
2.—White toe, or toes; white front foot or feet; white bar or bars on same.
3.—Decidedly crooked front foot or feet, leg or legs.
4.—Wry tail or absence of tail.
5.—Specimen blind in one eye.
6.—Mature specimens short of 5 pounds in weight.
7.—Diseased animals.

Qualifications

	Points
SIZE:—A mature specimen should weigh as much as 7½ lbs., (10 months of age.)	5
EYES:—Should be large, comparative to size of specimen, ...	2
EARS:—Should be as long as 5 inches when specimen is rated, ...	2
FORE LEGS:—Should be long, in forearm, comparative to size of specimen, ...	2
HIND LEGS:—Should be long comparative to size of specimen, ...	2

Shape

SHAPE of NECK and BREAST:—Should be firm, with no loose skin pendant in the form of a pouch or dewlap, ...	10
HEAD:—Uniformly long, narrow and not too deep, comparative to size of specimen, ...	4
BODY:—Very long in vertebrae, between coupling of hips and point of shoulder blades, ...	4
FLANK and RIBS:—Flanks well tucked up, ribs well curved, thus showing a cylinder-shap-	

ed body, said cylinder to be comparatively small in circumference for the weight of the animal. A specimen much larger around the body at point of stomach than it is at point of heart, is defective, as pouchy or Kangaroo shape is undesirable, ... 4

BACK:—Should be slightly and evenly arched, free from abrupt projections at rump or from flat or concave places—in short, a regular unbroken curve, ... 2

LOIN:—Should be full and well rounded, ... 2

EYES:—Should be round and bold, free from encrouchment by lids, or a flat retreating appearance, ... 2

EARS:—Should be well set on and persistently held in graceful style. When the attention of the animal is not attracted forward the ears should habitually take up a position that lines up the three positions, viz: One-fourth inch back of nostrils, on nose; one-half inch forward from apex of skull, on head; and adopted ear-mark No. 3, on ear; which is at beginning of perfect ear-lacing on thick edge of ear. The ears should not be broad or spoon-shaped, but when posed, neatly folded and persistently carried together at tips, ... 2

FORE-LEGS, SHAPE:—Should be straight in bone and firm in joint, neither coaching to one side or the other or weakening down at joint appreciably when tested, ... 2

Color

TICKING:—Ticking is the black points on the red hairs of the Belgian. Surface effect is what is considered. Three things are necessary to produce the desired effect—Quantity, Quality, and Distribution. Quantity should be in a proportion of 25 per cent. of black to 75 of rufous red. In quality we wish the most pronounced black and the most distinct red obtainable in order to produce the necessary contrast of colors. As to distribution, the black should be distributed in tones or waves over the red background, which gives a pleasing effect. Ticking effect should be viewed as a whole from a position at right angles to surface of arch at point of couplings on rump, ... 10

STRAY HAIRS:—Colored sections of the animal should not be encroached upon by having white hairs contained therein, thus marring the beauty of their respective requirements, ... 4

BODY COLOR:—Is hereby construed to mean the parts of the Belgian that are not otherwise provided for by this Standard and have special reference to back, above side color, and above the back of color on hindquarters, also to head and breast. Rich rufous red is the required color, defined by Webster as being a reddish-brown-red, perhaps more clearly defined by describing it as a deep cherry red carrying a dull rusty effect. The head may carry a very small amount of ticking and the breast should be entirely free from it, ... 5

COLOR OF SIDES:—Should be 60 per cent. of absolute perfection in body color and should be carried well down to a distinct junction with belly color, ... 4

COLOR OF HINDQUARTERS:—Should be 60 per cent. of absolute perfection in side color or 36 per cent. of absolute perfection in body color. Should be considered from standpoint of surface color and depth of color as well, ... 4

COLOR OF HIND FEET:—Should be a clear golden rufous, with no tendency to white on top or blueish or smudgy cast at side, .. 4

COLOR UNDER JAW:—Should be a rich, deep cream color, not to show out noticeably when viewed from a side position at an angle of 50 degrees elevation, ... 2

COLOR OF BELLY:—Should be a bright cream; neither a pure white nor a deep or cinnamon color, ... 2

COLOR OF EYES:—Should be a rich hazel, resembling somewhat a finely penciled chestnut shade of brown, ... 2

EAR LACING:—Should begin on thick edge of the ear, one-fourth way from tip to base and should extend round the point of ear to slightly past, an equal distance down the thin edge of the ear. Should be a jet black and confined closely to the edge of the ear, averaging about twice the width on the thick edge that it does on the thin edge, ... 2

COLOR of EARS:—Should be a bright golden shade of rufous, and entirely free from

ticking; neither should it be encroached upon by ear-lacing beyond the proper location for same, ... 2

COLOR of FORE LEGS:—Should be a rich, rufous red, free from ticking and smudginess,... 2

Quality

QUALITY OF EYES:—Should be bright and expressive, indicative of health and vigor,.. 2

QUALITY OF EARS:—Should be thin toward tips, fine in texture and pliable, moderately well covered with close coat of hair,..... 2

QUALITY OF FORE LEGS:—Should be fine in bone comparative to size of specimen, and not coarse and beefy in flesh, ... 2

QUALITY OF HIND LEGS:—Should not be coarse for weight of specimen, ... 2

CONDITION OF FLESH:—Should be firm and solid, and specimen closely skinned and neat and free from recent blemish, ... 2

CONDITION OF FUR:—Specimen should be close coated; fur well set on and free from moult; also clean and smooth with unbroken surface, ... 2

100

COMMENT:—I think the active existence of the National Belgian Hare Club of America has ceased, and I am not sure that the Standard of it as above reproduced has had more than transient recognition. At any rate, the wording in many respects is superfluous, and were the English Standard just a bit more lucid—or, shall I say, if the superfluous were removed from the American, and added to the English, the latter could likely be best understood by the beginner. It is a pity that both are not what one could desire, and I believe a complete and very careful reconsideration of the Belgian as typically bred today in England and this country, would recommend itself to the fancy as most commendable.

When it comes to having an American Standard, as possibly many American fanciers would wish—and with good reason it would of necessity have to be adjusted to the English type of Belgian, and consequently only a modification of the English Standard. In view of this fact I think it would be well for me to submit a study for the Standard of the Belgian Hare which I have prepared, having given it careful consideration along every possible line. I feel that it may be a future guide for the formation of a Standard that can be readily accepted by all.

Study for the Standard of the Belgian Hare

REMARKS:—A Standard for judging Belgians should constitute sufficient verbiage to make every passage clear and free from misleading descriptives.

The true virgin Hare, to whatever country it may be "indigenous" has never been domesticated, nor has it been hybridized (so far as definitely known) by admixture of blood from any species of either wild or domestic rabbit. The attempt was made, but failed, nothwithstanding obvious claims.

In other words, the Hare—**lepus timidus**—has maintained its zoological identity quite as individual as the elephant, lion, or tiger.

The animal we breed under the name Belgian Hare is not at all of the species **lepus**—it is purely a species of rabbit bred to a high degree of perfection. Belgian (Belgium) breeders, I believe, claim priority to this species; but in that country nothing near approaching the type bred in England is produced, and English fanciers can justly claim title to its present perfection. The Belgian Hare as reared in America (I mean the typical Belgian) is entirely the product of breeding stock imported from England, and it is the English species of it, so to say, that we must of necessity propagate, unless we hybridize away from the Hare type and create an obvious one along rabbit lines.

We may be able to, by reason of climate environment, and other possible influences, produce possibly somewhat of an American ideal though I see no advantage nor likely consummation in the attempt, nor would I advise it.

SIZE:—The classic breeder clearly understands what size has to do with breeding the typical Belgian Hare. The uninformed has not, and unless size is made a part of type and intelligently standardized, it becomes objectionable in that it destroys the Hare characteristic. Hare type stands for raciness, and this can not obtain when bulk is a leading requirement; and there are not a few, I am sorry to say, who think this sacrifice should be made, and

to whom I would suggest that if a large rabbit is desired for utility purposes make one by hybridizing the Belgian and Flemish, or Flemish and Silver.

I believe it would be considerable advantage to type if the present weight of eight pounds were reduced a trifle, and a more specific classification made. The following weights, I think, would admit of all practical latitude for Standard results of breeding for racy type:

Does above 10 months old,	7	to 7½	lbs.
Does 8 to 10 months old,	6	to 7	lbs.
Bucks above 10 months old,	6½	to 7	lbs.
Bucks 8 to 10 months old,	6	to 6½	lbs.

All specimens under 10 months old to be considered as youngsters, and for judging are classed by months limit of age and rated by comparatives.

WHITE:—There has been much discussion among foremost fanciers as to how much white—understood as white-bellied and grey haunches—should be tolerated to pass Standard criticism.

It is a fact that there exists an innate propensity in all animals of vari-colored fur coats to change from dark to lighter shade incident to season or age. The reason is a physiological one, and should be considered when judging an animal of domestic breeding if this characteristic is apparent. To allow certain degrees of white and grey (with consideration of the above phenomena) appropriately placed without jeopardizing the standard body color, would appear admissible. In other words, a specimen answering to every characteristic of type and color features should not be thrown out unless the white on belly and under jaw and grey on haunches exceeds a qualified per cent. into the other color (rufous.)

DEWLAP:—This appendage is characteristic of the rabbit species, and NOT of the Hare. Its presence is evidence of "breeding back" to an original rabbit strain. The nearer free (and absolutely, if possible) a Belgian Hare strain is kept of it by scientific breeding, the closer a pure Hare type will it attain. But since the present Belgian is withal not a Hare **per se,** its presence **to a degree** is justifiable, and should not debar a specimen from qualifying in its class.

NOTE.—The dewlap is not a deformity, nor a disqualifying characteristic, unless so abnormally large as to make it such, and clearly indicate the specimen to be entirely foreign to the Belgian Hare type. It so happens that many otherwise good specimens show this appendage in various degrees of development; but which was not apparent prior to maternity, or a certain age, which have reproduced others entirely free from it.

These factors should be considered when judging; but a male specimen with more than a mere evidence of dewlap, is to say the least, undesirable as a stock-getter, and should be disqualified if it is akin to that in a doe.

The dewlap should not be confused with a not infrequent udder-like enlargement of the breast incident to maternity, and which will disappear after the nursing period (unless the doe is again soon bred.)

COLOR:—Much discussion, and sometimes very caustic, was had as to what constitutes **rufous red?** According to some authorities, it is a term that admits of a varied interpretation, and the dictionaries define it as identifying a compound color.

The term **rufous** is from the Latin **rubro,** meaning **red.** Spelled r-u-f-u-s, is the technical Latin form and is translated r-u-f-o-u-s, meaning a **shade of red;** but nowhere is any reason essayed why it should identify as **brownish-red,** or a "red tinged toward brown," as dictionaries define the term.

Breeders, according to their fancy, contend for "golden chestnut" as the correct shade; some say "golden tan" as still more ideal, and others again say "chestnut tan"—so on **pro** and **con,** with no one exactly satisfied. Because of this contention, therefore, I make the term as clear as we at present understand it.

Brownish-red is all that can be analyzed out of the term **rufous.** Of gold there is a light and dark shade according to per cent. of alloy present; but virgin gold is a characteristic tinge, shade or color, as you please, of specific identity. There is no tinge just like it. Of **tan** and **chestnut** there are degrees of

shade; but it is that shade defined as **brownish-red** with which we have apparently to do and it is the degrees of intensity, therefore, of this latter tinge from light to dark that must constitute one's judgment of what we understand as **rufous.** To formulate an ideal color effect in harmony with the conception of the term one will reason thus,—take virgin gold as the standard for red, and the dark shade of a ripe chestnut for brown; tone down the density of the latter with the mellow tinge of the former, and you have **rufous** as it should show on the Belgian Hare.

TYPE:—This term has also caused much discussion, all I trow, due to either misconception or misunderstanding, or possibly both. A small knowledge of Natural History, Biology, and a bit of Comparative Anatomy, will harmonize definitives nicely so we can apply the word **shape** as being more commonly clear.

In its compactness **type** virtually IS **shape,** though many will haggle otherwise; but what I wish to convey by both (if you please) is—the physical characteristics of the animal one observes as a whole, or perhaps more desirably, an ideal whole. Literally it means "a stamp or mark;" that is, an impress, contour, outline, or physical conformity to a prescribed pattern—if the latter term is allowed. Color is a nominal characteristic; but is not essentially a part of type. The type that should "stamp" the Belgian Hare as ideal must portray raciness—slender, reachy body; thin, firm and lengthy limbs; narrow, racy-looking head; bright, bold, attentive eyes; ears long, thin, almost transparent, and continually posed for attention—the animal altogether portraying a **qui vive** entirely free from sluggishness, slouch, and pudginess.

Standard of Points

Disqualifications

1. Mature specimens weighing less than 6 lbs.
2. Thick, compact, pudgy shape of head, body, or legs, and evidence of other than typical Belgian Hare qualifications as hereafter defined.
3. Deformity of one or both ears not due to accident; either lopped or wry, or less than 4½ inches in length.

4. Hereditary deformity or blindness in one or both eyes, or of foreign color other than shades of hazel.
5. Feet marked on top with white, especially forefeet, or white bars across the toes. Legs bowed inward or outward, or deformed (except by accident.)
6. Wry tail, or twist, not due to accident or habit; or entire absence of tail.
7. Diseased specimens.

Qualifications

Points

SIZE:—Mature specimens above 10 months old—
Does 7 to 7½ lbs.; Bucks 6½ to 7 lbs.
From 8 to 10 months old—
Does 6½ to 7 lbs.; Bucks 6 to 6½ lbs
Under 8 months are considered as youngsters, and are in limited months classes.
Above 8 lbs. is considered over-weight,.. 5

EYES:—Should be round, bold and attentive, free from encroaching lids, and of hazel color. There must be no evidence of flatness, or of appearing to retreat, ... 5

EARS:—Correct length for mature specimens, five inches, measured from crown of the skull between the ears along the convex ridge to the tip, ... 4

Ears must be gracefully set, close together that the convex spines approximate at their roots directly on the highest point of the cranium. Looking to forward attention the anterior margins approximate closely half their length from below,—to backward attention, the posterior margins do the same from above. These approximations give the ideal pose of correct earage, ... 2

Their texture should be fine, and transparent as to show the beautiful ramifications of "tiny" bloodvessels, tapering thin toward the tips, and not spoon-shaped. Externally they are moderately covered with fine hair of same shade as on the crown, free from ticking, nor encroaching on lacing around the tips, ... 2

Lacing must be jet-black, and begin at the convex break of the outer (anterior) margin, around the tip, and down the

inner (posterior) margin at least one inch, or more. Lacing is densest on outer margin, ... 2 10

HEAD:—Neatly and racily long, inclining to narrowness, and proportion of depth to length about 3 to 5, ... 4

NECK:—Neat, firm, and free from pouchiness, known as dewlap. A limited evidence of the latter in does when breeding does not disqualify. In bucks it does, ... 5

BODY:—a. **Back.** Must be free from projections, or depressions, and at the sacral (hip) joint should be nicely rounded body lateral and lengthwise. It should not end in a choppy rump; but outline a harmonious arch from the shoulder-blades to the root of the tail. Coupling is long and graceful, ... 4

b. **Sides.** Must harmonize with back curvature; ribs nicely rounded and curved inward, more around the short (floating) ribs than the chest, so as to give the body a cylindrical form evenly outlined along spine and belly line; flanks tucked up to give the shanks prominence and thus outline a typical racy profile. These should be no pouchiness of the abdomen—kangaroo-like—unless slightly obvious in matron does, ... 4

c. **Belly.** Must not be pendulous or pouchy, but harmonize with the body curve characteristic of racy type, ... 2

d. **Fore-quarters.** This embodies the chest, fore-shoulders, and breast proper, which must be full, strong and roomy for the inner organs, and gracefully balanced on the slender fore-legs. shoulder blades nicely tapered toward their apposition at the spine but not protruding above it, ... 4

e. **Hind-quarters.** Mean the hips and shanks, which must harmonize in grace with the fore-body. Hips must not protrude above the spine, and shanks will round out the curve of the back without choppy effect. Shanks must be strong, and prominent at the flank, tapering full and round toward the spine—with ideal "race-horse" effect, —not peaked, ... 4 18

FORE-LEGS:—Must be straight and slender, but firm, and of comparatively long reach. Mature specimens should measure 5½ to 6½ inches from toe to shoulder joint. Toes straight and neat together, ... 4

HIND-LEGS:—Are lengthy and strong, a bit heavier of bone than the fore-legs; act and fold on a straight line with the body, and directly beneath it. It is important that they do not crouch forward (to enfold the fore-legs,) nor backward to drop the abdomen, ... 4

TAIL:—Must set straight and close to the back,.. 2

COLOR:—Description of **Rufous Red.**—The term means **brownish-red,** but is designated by some as "golden tan." Technically, it is a **chestnut-brown,** mellowed by the tinge of virgin gold. It is a difficult, but exceedingly rich color, and calls for keen judgment. It is the characteristic color of the Belgian Hare **per se.**

a. **Color of Head.** Is **rufous,** but may show a very limited ticking, principally on the jowls. Under jaw a small patch of white or creamy white, ... 2

b. **Color of Breast.** A rich, deep **rufous,** entirely free from ticking, and blending harmoniously into the side color and down the fore-legs, ... 2

c. **Color of Body.** Is **rufous,** modified in sections as follows: Nape of neck a clean unmarred rich red, from which it grades into a denser (appearing) shade along the back, due to the black-tipped hair known as ticking; and to an even or trifle lighter tinge along and down the sides until it merges into the belly-white—the latter to be entirely beneath the line of vision at an angle of 45 degrees. Deep, rich **rufous** undercolor in all these sections is essential, and the more universally present "over all" is evidence of nigh breeding, ... 8

d. **Color of Fore-legs.** Must be an extension of the deep **rufous** breast color to tips of toes. There must be no ticking or smudginess (appearance of smoke,) and no white on toes, ... 5

e. **Color of Hind-Legs.** Must be distinct **rufous** entirely long and around the

legs to toe-tips. There should be no white from the knee-joint down on the inside or top, and no smudginess on the outside, ... 5

f. **Color of Belly.** Is white tinged with **rufous,** giving a golden cream effect, 3

g. **Color of Haunches.** Should be a continuation of body color a possible two-third to three-quarter down the side, extending over the fore-shank to the knee. It is desirable to have as limited grey on the inferior shank as possible. A handsome effect of ticking is looked for, carried well down,.. 5 30

TICKING:—Consists of the long red hair tipped jet black. It is required from the shoulders along the back to beyond the hips, beginning directly behind the shoulders with evenly distributed black-tipped hair and gradually growing denser, until across the loin section it assumes a patchy aspect of wavy effect, extending over the superior portion of the haunches, down their sides, and down the back almost (or altogether) to the root of the tail, ... 5

NOTE.—The matter of ticking to be of "wavy" or "patchy aspect" is open to a question of option by the classic breeder. Many prefer an evenly distributed effect, with a gradual increase of density from fore to rear. It will be noted that the **rufous** color in evenly ticked specimens is richer and of a rarer "golden" tinge than in those of "patchy" effect.

CONDITION OF FUR:—Should be compact and "close fitting," well set on, free from moult, and without blemishes or foreign-colored patches, ... 5

CONDITION OF FLESH:—Should be firm and closely moulded to the bony frame—after the manner of a race-horse; and free from evidence of disease, ... 5

100

Official Belgian Hare Standard

Adopted by The National Pet Stock Association of America.

	Points
COLOR:—Rich Rufous red (not dark smudgy color) carried well down sides and hind quarters and as little white under-jaws as possible	20
SHAPE:—Body long, thin, well tucked up at flank and well ribbed up back, slightly arched loins, well rounded, not choppy; head rather lengthy, muscular chest, tail straight, not screwed; and altogether of racy appearance	20
TICKING:—Rather wavy appearance and plentiful	10
EARS:—About five inches long, thin and well laced on tips, and as far down the outside edge as possible. Good color inside and outside and well set on	10
EYES:—Hazel color, large, round, bright and bold	10
LEGS AND FEET:—Fore feet and legs long, straight, slender, well-colored, and free from white bars	10
Hindfeet—Well colored, without dewlap	10
SIZE:—About eight pounds	05
CONDITION:—Perfectly healthy, not fat, but flesh firm like a race horse, and a good quality of fur	05
	100

Feeding

To be successful with hares depends perhaps more on practical and common sense feeding than any other feature connected with their "bringing up."

And on the other hand, I am safe in saying that more losses of stock are directly attributable to carelessness, or possibly overzealousness, of it, than all other adversities. Indeed, the hare is by nature, so singularly free from disease (and vermin) in any form, that whatever ailments are encountered in various ways are nearly all traceable to some error in supplying food

Nearly every fancier, and breeder of some import, furnishes a circular or brochure in response to an application or sale of stock, and it is of considerable interest to read over the obvious instructions vouchsafed in it, particularly with regard to feeding. There are few directions in

which all agree, and the variance is so great that a beginner must become seriously confused, with the chances of making mistakes very much in his favor. Then, too, what one reads in the several magazines which devote space to hare topics is also of such wide range of opinion that one at first sight must almost conclude that no fixed rule for feeding hares exists, and that each manages tolerably near according to his own notions. And, is such a conclusion far wrong, I trow?

One breeder speaks of green things with utter fear—almost dismay and uses only the littlest of little of it; another is more liberal, but conservative in quantity, while a third gives as much as the hares wish to eat, and all three get along without trouble, apparently. Some advise certain foods in the form of mash, anyway from soft to dry, others feed no mash at all. Then growing youngsters come in for special dieting up to a certain age, and again they come in just the same as the old ones. Thus opinions shift along, and the hares that don't die from over-attention may die for want of it, and the rest grow up.

But, seriously, feeding should be managed along intelligent lines just as everything else—not overdone, nor underdone. Common sense comes nearer being pleasing to the hares than too much concern or not enough. No matter what the creature may be that one takes up for either fancy or utility purpose—from the larger animals to the smaller pets—to be successful with their "bringing up" the first essential is some knowledge of their instincts and physical characteristics. In the case of the hare (or rabbit,) we know how it lives in the wild state, and that its domestication was a gradual advancement from that into its present, which should imply, that its food now cannot be greatly modified from what it finds when compelled to hunt for it—summer and winter. To know what this is should not be at all difficult; for a hare exists about exactly as a sheep would were the latter to seek food as an undomesticated animal. This holds good in the domestic state as well. Feed the hares as one feeds sheep, and there can't be much room for error.

One instinctive characteristic of the hare, and which to me personally has been a guiding factor in the successful rearing of it, is that it prefers to feed at night. Unless annoyed, the hare in its wild state is quiet during the day, and the Belgian very much so if undisturbed, and sees no one. I make it a rule to have mine as little disturbed in daytime as possible, and in connection with this thought I will give my method of feeding, and the feed I use.

My hares are never restless until approach of evening "meal time," which is invariably at sunset. Then they are fed sufficient that I know the stomach is full in the morning, and the days of long nights, I give out one mess

in 24 hours. They are glad to see me in the morning, but not frantic for food, and all they get is a swish of clover hay, or every third day something green. With regard to the latter I am very particular that no medicinal plants are fed. By instinct, a hare does not eat them in the wild, but a domestic rabbit by being sometimes long deprived of greens, occasionally forgets himself. Dandelion is injurious, and plantain should be fed only sparingly. Turnips and carrots are a good relish now and then; but hay-clover, alfalfa, or timothy is most I feed, both green and cured. Mash feed of any sort I don't use, nor milk at all. Pure water is the only liquid—twice a week in winter, and every day in summer. Once a week I mix a teaspoon tincture of iron in half a bucket of water—a tonic in a way, and keeps them slick. So far I had no sickness among my stock.

My regular feed for the substantial evening mess consists of bran, 1½ parts; ground oats, 1 part; whole oats, 1 part; whole wheat ½ part; cracked corn, ½ part, and hominy, ¼ part, thoroughly mixed. Young and old are fed alike, except as to quantity per animal. Of course, I expect many to differ with my method, and I shall not object. I have my reasons for feeding this way; my pets are happy, and healthy, and sleek as eels; and as said, were well since I have them. I might add that twice a week I mix a tablespoonful fine salt to four quarts of feed as an elementary essential. Some breeders keep a lump of rock-salt in the run—a serious mistake I think—for salt is a poison in an over indulgence, and causes bowel trouble. I do no exhibiting at shows, but such as do, usually devote some extra attention to feeding in the hope of developing extra sheen in the "coat," and a brisker appearance in general. In England this is done to quite some degree, and not a few enterprising parties advertise "just the thing to make you win." It is the same in this country, and as a precaution wish to say that all "condition" feeds and powders are injudicious extras prepared from business motives, and buyers should know that the various cereals and vegetables which constitute the food of grain eating animals contain all the nutrient nature intended they should have. Feeds containing condiments or medicinal ingredients should always be used with discretion, and all mixtures of this sort that ever came under my notice were merely a combination of the grains usually fed individually in a way, with either cottonseed meal, gluten in disguised form, or sugar obviously prepared, added, with all of which the well informed breeder is likely acquainted beforehand. These mixtures cost more than regular feed, but are they worth more? One important consequence should be persistently remembered with regard to the use of prepared feeds—they usually contain stimulating material in some form—an un-

natural effect upon flesh tissue—the re-action from which is always detrimental far in excess to the apparent benefit. The only safe line of correct feeding lies along the course laid out by the physiological laws in nature.

A few paragraphs ahead I spoke of feeding no milk in any form to my stock. I don't like it, and found no occasion to do so. Many, however, do, and I do not wish to advise specially against the use of it as a food. I receive numerous inquiries along all lines of interest in breeding hares, and among them are many asking the advisability or propriety of using it for young and old stock. The great danger of feeding milk lies in chemical changes. That it is a good feed for young stock is true, but remember, young hares in the wild state don't have it after the mother forsakes them. Milk as a diet for young animals was not intended for them longer than the parent supplies it. If one does feed it after weaning the brood, great care is required that it is perfectly "fresh," and only so much given as will be consumed at once. Let none sour in the dish, for sour milk is acid, and causes what in hares is known as "slobbers"—a very annoying trouble. Remember, too, it is an animal fluid, and not identical to water as a liquid. Ptomaine poisoning is possible from it. If mixed with dry feed of any sort, be sure that the dry feed contains nothing that will cause chemical changes in the milk. With these precautions in mind, it can safely be used as a feed. I have on several occasions noticed "directions" for feeding cabbage. Some eschew it as a poison for hares, while others feed it freely. It is not a poison, and the hares are fond of it, especially as a green food in winter; but, like all things, don't overfeed, and be sure it was not treated with a paris-green solution against worms in its early growth; nor previously frozen.

Potatoes I never feed, nor do the hares care for them. Boiled, and crumbled in with dry feed, they should not be objectionable; but I consider them too rich in starch unless fed very sparingly. Sweet-potatoes are not as rich in starch as "white," and are somewhat allied to carrots. I feed them sparingly when I have no carrots or turnips. Indeed, all greens should be fed with caution against excess. In summer time when clover is plenty, I feed it daily in conjunction with cured hay—mornings—but it must be fresh cut. Wilted grass, for obvious reasons, are objectionable. Because greens are so plenty during the summer season there is grave danger in overfeeding bunny with it, and I have observed that paralysis is one of the results, by losing several valuable young on an occasion when I was called away professionally for three or four consecutive days, while the children enjoyed themselves "tending bunny while you was 'way, papa."

Hutches

This means a chest, box, case, or bin in which rabbits are kept. The little creatures are not at all particular as to dimensions, style, or expense laid out to keep them; but with hares, as with the care of all other animals, if one desires to get on well with them it is essential that they are kept with regard to comfort and cleanliness. It does not matter, either, whether reared for **fancy** or **utility** purposes, comfort and cleanliness count as much for one as the other, because both are absolutely essential to bring up a beautiful animal as well as a useful one.

The character of the hutches depends on the number of hares one intends to rear, and say any number upwards of twenty, the most ideal method is to have them side by side, so built with wire netting that they can see each other. The matter of size is optional, and should be arranged in harmony with the number to be kept in one compartment. Some breeders build their hutches one tier above the other, no doubt as a matter of economy for space. This method is objectionable for sanitary reasons, notwithstanding every effort to have the floor above unleakable tight.

As said, with reference to feeding, so in this—keep as close to nature as one can possibly manage, and this implies, that a bare space on the ground is nearest right. Here again I will give my method of housing my pets—not essentially as an authority—but as information for the beginner. I keep a tier of four roomy hutches specially built for four breeding does. These I had made out of two piano boxes sawed in halves and set ends on, with each an outside run, making the room occupied by one doe 2½ x 3 inside, and 3 x 4½ outside, and 2 feet high along the lowest roof-line. The nest boxes are fastened on the outside along the back (entire length) a foot wide, and one and one-half high, with a sloping roof cover on hinges. Thus arranged, one can examine the nest without disturbing the doe, besides being convenient for cleaning.

As a precaution against rats I built the floor one foot from the ground, and space partition and pen surrounding of one-inch mesh wire netting. The wood bottom floor is kept covered with straw inside, and outside with sand and fine straw. Of course, my breeding hutches are quite roomy to be occupied by a single doe to each compartment, and smaller spaces by one foot every way would answer nearly as well; but if you have the room to spare, make bunny happy with space for needful exercise, especially for the babies up to weaning time.

It is a rule with me to breed at least two does a few days apart, so the young can be penned together after removal from the mother.

My large runs for the growing youngsters are so far, four in number, 2½ feet wide, and 18 long, with a "hiding" box at the far end. These have ground floors covered with 2 inch mesh wire netting—no, they don't dig through this—they try it once, that's all. Beside these, I keep ten extra hutches—two for individual bucks, four for emergency, and four smaller ones for hospital purposes. I also have a prison for unruly tyrants. All these occupy a ground space of 24 x 30 feet, which is entirely covered with a roof of tar-

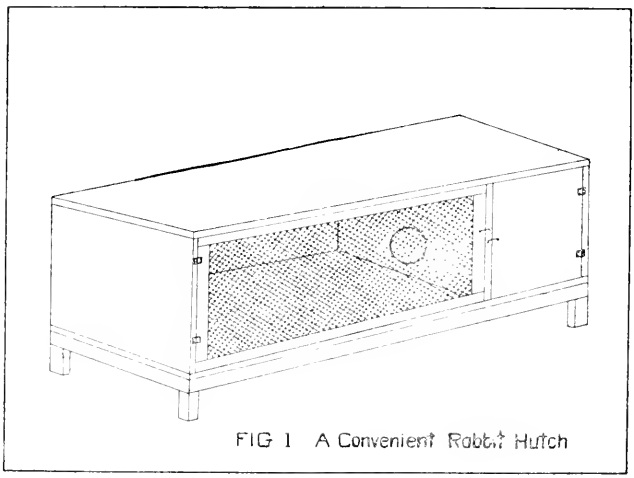


FIG 1 A Convenient Rabbit Hutch

paper fastened on skeleton frame-work as a protection from the elements and hot sun in summer, of course, strict attention is given to thorough disinfection aside from the regular cleaning. For this I use the commercial (crude) carbolic acid, which is sprinkled along the sides and corners, inside and out. Droppings are cleaned out every alternate day in summer and once a week in cold and freezing weather. In short, the hutches must be kept clean, dry, and disinfected, so I can go out any time, take up a bunny and handle it without soiling my hands or clothes.

Now, this is my way of doing things, and as previously noted, no sickness has as yet given me trouble of any sort.

In England, the breeding of hares is recognized as a fancy, upwards of half a century, and in the past twenty years has received more scientific attention than in any other country, and while individual breeders do not perhaps conduct rabbitries on so large a scale as some in America, there are more devoted to it. Special attention is given to the racy type so characteristic of the English wild hare, and to this end the hutches are built high, rather than wide and long. This is a commendable idea, and goes far toward obviating crouchiness, with the accompanying tendency to develop the objectionable dewlap. Various contrivances, also, are resorted to with a view to the development of ideal points, such as placing a board

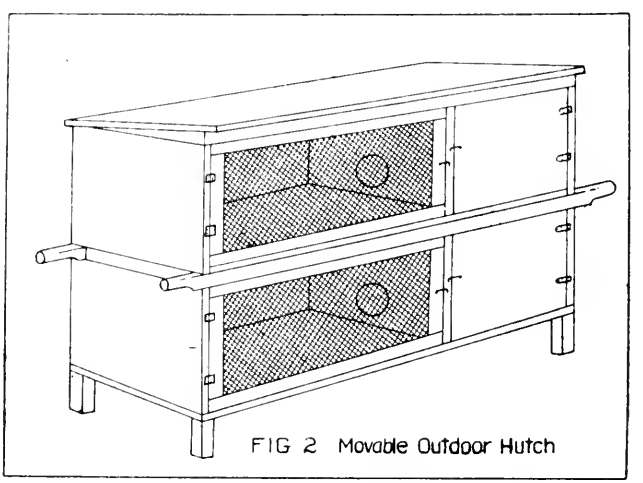


FIG 2 Movable Outdoor Hutch

cross-wise in the run a foot or so high for jumping exercise, which is supposed to give length of limb, span from shoulder to sacrum (across hips,) well set ears, and tuck-up of flank. Feed boxes are built to compel a stretch of the neck in order to reach the food, another factor toward creating length. Such adjuncts are of course, only novelties toward an end; but are indeed essential for obviating objectionable tendencies and training out desirable ones. Then, too, many fanciful ideas can be carried out in constructing hutches which go far to give the breeding an appearance of taste in commendable harmony with the spirit implied by the term **Fancy.**

Breeding on a large scale necessarily requires space commensurate with the number one quarter is to contain,

and in all events must be so that the timid ones in a batch have room to evade the tyrants always found among it. Absolute freedom for exercise is an essential in utility breeding as well as fancy.

To breed on a small scale and with limited space, individual specimens should, if at all possible, never be given less room than 4 feet long, 1½ wide, and 2 to 3 high. This is, for such who desire only a few hares for occasional table use, and while rearing them thus they will do well when sensibly attended—in open or closed quarters—they do best of all with as much room as one can spare.

A convenient indoor hutch (Fig. 1) is one 6 by 2 feet, with a movable partition dividing off a third of the space

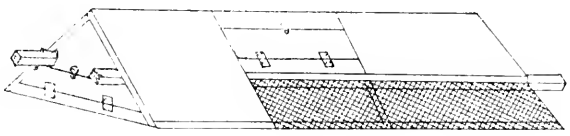


FIG. 3 A Simple Movable Outdoor Hutch

at one end for a nest and sleeping chamber. The partition has a smooth hole to permit passage of the animals from one part to the other. The front of the hutch has two doors, one of wire netting, the other of wood. The wooden door leads to the sleeping chamber and should close tightly. It is best to use metal hinges for the doors. The partition may slide in a groove between the doors or may be put in and taken out through one of the door openings.

Outdoor hutches should have sloping roofs and overhanging eaves to protect them from rain. The screen door should have a sliding cover of wood or be fitted with a removable cloth cover. Small holes bored near the top of the hutch will afford all necessary ventilation.

Movable hutches (Fig. 2) have some advantages. They may be carried outdoor in fine weather and taken back under shelter at night during storms. Long, narrow cleats projecting at both ends of the hutch are all that are needed to convert the ordinary hutch into a movable one. Two forms of outdoor hutch sometimes used are shown in Figures 3 and 4. That in figure 3 has no floor except a wire screen, permitting the rabbits to eat grass

In conclusion of this topic on hutches allow me to emphasize again the positive necessity of cleanliness and disinfection, whether the room occupied be large or small; for once sickness gets among a herd its eradication is often a serious trouble. An excellent disinfection, as well as

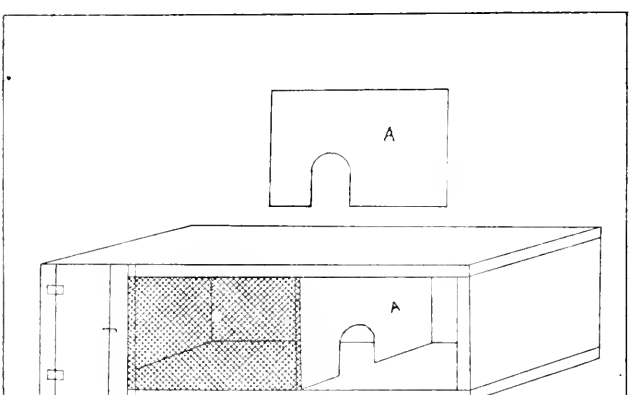


FIG. 4 A Simple Outdoor Hutch

a point of cleanliness, is to white-wash all board-work with a lime solution strongly impregnated with crude carbolic acid and if a handful of salt is added to the lime while slaking hot, its "sticking" and lasting quality is greatly enhanced. By following along the lines here explained, the housing of hares will be a matter of comfort and success, with every possible source of disease eliminated.

Ailments of Rabbits

Rabbits of all kinds are remarkably free from diseases if they are properly cared for. With many years of breeding to my credit, I find that prevention is the best possible cure. There is too much coddling of rabbits and they are as a consequence, not hardy enough. If you have vigor and pay for the proper attention to feeding, housing and sanitation you will have little or no disease. Under no condition breed from stock that is suffering from snuffles, scurvy, and vent disease. If you wish to build up a stud that will be permanent and a pleasure to you, it is absolutely necessary that you breed from specimens that are perfectly sound and healthy.

We are preaching the gospel of fresh air and it is one of the very best preventions of many diseases. Above all, get busy and correct the first symptom of disease. As a general thing in the early stages it is easy to cure but after well seated it is almost impossible to affect a satisfactory cure. The most prevalent disease is the sniffles. Common sense methods in selection and housing has very materially reduced this disease and yet they are susceptible at all times to colds. When the first appearance of a cold or sneezing appears the specimens should be taken in hand at once. One of the very best remedies to administer is ten drops of Tincture of Aconite in the homeopathic form in a drink of water or milk. Rabbits suffering from snuffles should be kept in a warm, well ventilated hutch, well bedded with hay and thoroughly disinfected. Easy digested foods should be given them. Boracic powder and iodoform powder in equal parts blown up the nostrils has been used with excellent results.

Slobbers

INDIGESTION is the cause and should be treated as follows: take one tablespoonful each, chlorate of potash and powdered ginger, adding one pint of water; let stand for a few hours, shake thoroughly and give teaspoonful doses twice a day.

Paralysis

THERE is no cure for this. You will find the animal dragging its hind quarters around the hutch as though the hip bones were broken. Kill at once and put it out of its misery.

Skin Eruptions

TREAT these with an ointment made of equal parts of petroleum jelly and flour of sulphur, rubbing it well into the scurf. If you are troubled with sore hocks resulting from dirty hutches, apply the same remedy.

Diarrhea

YOUNGSTERS are particularly troubled with this disease after they have just been weaned. Sudden weather changes such as excessive heat or excessive cold will cause it and in some instances is the result of fright. An abundance of green food, if too wet or stale, will often cause it. When the symptoms are first noticed, all green food should be removed and they should be fed on old clover hay and dry grains. Mix one teaspoonful of pulverized arrowroot in a teacupful of milk and give the specimen daily until the diarrhea is checked. Pine sawdust acts as a disinfectant and is a splendid floor covering and absorbent during this period.

Ear Canker

THIS is a very troublesome disease and extremely painful to the animal. If proper attention was paid to cleanliness there would be little trouble along this line. Syringe the ear with warm, soapy water until the wax has become soft; then remove with a blunt instrument, applying an ointment made of one ounce of petroleum jelly with five drops of carbolic acid, well worked into it.

Insect Pests

FLEAS are a constant source of worry to rabbits, especially to Lops. Any good insect powder well worked into the skin will rid the specimen of these pests. After thoroughly dusting and rubbing it well into the coat, it is well to use a small tooth comb to remove them. A splendid insect powder is made of equal parts of Persian insect powder and tobacco powder well worked together.

Running at the Eyes

THIS is a common disease but is easily cured by placing a little zinc ointment on the eye-ball, closing the lid over it and working it in well. If you have a stubborn case, dissolve a tablespoonful of boracic powder in a pint of boiling water and when cold bathe the eyes thoroughly. If any running sores develop, iodoform ointment will give immediate relief.

Constipation

THIS can readily be overcome by feeding an abundance of green stuff and cutting out the corn and hay, feeding only a meal mash, to which a little boiled linseed has been added. If no response to this treatment, give half a teaspoonful dose of syrup of buck thorn daily until again normal.

Skin Troubles

THERE are a number of forms of skin trouble resulting in bald patches. This should not be neglected for many valuable specimens have been ruined in this way. Cantharides ointment will kill the parasite and assist the fur to grow.

Abortion

THE prevention of abortion is difficult. Disinfect the hutches thoroughly and do not feed flowers of sulphur during the breeding seasons.

Vent Gleet

THE cause of the disease has not as yet been thoroughly worked out. I am convinced that it is similar to gonorrhea in the human family. Isolate the specimen, disinfect the hutch from which it was removed. Give 30 grains Epsom Salts and twice a day inject a 4 per cent. solution of cocaine and immediately after a solution of nitrate of silver, 4 grains to the ounce. The fifth day commence a small copabia capsule daily and inject acetote of lead, 1 drachm to the pint, fed rather low and dust any sore places outside with iodoform. Under no consideration, breed an animal showing the slightest symptoms of this disease.

Preparation for the Show Room

The inherent desire within the breast of man is to produce something just a little better than his brother, to show it just a little better than his brother and to win just a few more blue ribbons in keen competition, in the Show Room.

Preparation in many instances means success. There was a time a few years ago when the breeder could rush to his hutches, grab up a few rabbits, throw them into a basket and send them to the Show Room and win with them; but that day is past. It is absolutely necessary to show every animal in as good condition as possible. Over crowding is conducive to all sorts of trouble and should be carefully avoided. Again, over showing results in a long chain of ills that are exceedingly difficult to overcome. These two failings, (and they are often the result of thoughtlessness) have hindered the success of more fanciers than anything else we know of. Every care should be exercised in the selection for show purposes, being careful to apply the Standard strictly and select specimens that exhibit a general set of selected points.

The animal should be long and thin, both in body and limbs. The ears should be long and carried well backward. There should be practically no ticking at the selection age, say three or four months. The hind feet should be level in color, the same being carried well up the hock. One mistake is often made in selecting specimens that show choppiness, but my advice is to get rid of these at all cost. You have here a small gauge to select promising youngsters by. After having made your selection they should be placed in large, roomy hutches, fed on stimulating diet and should have every care and attention paid them. Don't misunderstand this to apply to all varieties of rabbits, for it is my intention to apply the above one to the Belgian hare. What would be necessary in the selection of the Belgian hare would be fatal to a Flemish Giant. Condition, however, must not be misunderstood. It does not represent fat or bulky station. It appeals to me as a means whereby specimens exhibited may be shown in a state representing a high standard of excellence, consisting with the points of the variety.

In all varieties shape must be given first consideration and it is absolutely necessary that youngsters be given as much exercise as possible. It is well to construct a running hutch with a jumping board across the middle, compelling them to race around the hutch and in jumping over the hurdle they will harden the flesh and decrease the size of the stomach. The exercise, too, is also important to increase the length of limb. Many English breeders in preparing choice youngsters for exposition, or when the specimens are under a great strain, advocate the use of egg flip. A simple way to make it is to beat up three eggs with a little moist sugar, gently adding a pint and a half of milk, beating it together thoroughly and give each rabbit a teacupful for the evening meal. While for the morning meal, give a little green stuff and the best oats and wheat mixed, two-third oats, and one-third wheat, while a little clover hay should be added to the morning or mid-day meal.

One of the great secrets of success is in proper grooming. With the short coated varieties a thorough rub with the bare hands, following it up with a dry chamois skin, is all that is necessary. There is nothing better than a low table to use for grooming. Cover it with a piece of carpet or clean sack, nailing it down so that the specimen may have something to grip on to with his feet. You will find this a comparatively easy way to groom them. When the specimens are moulting they should be groomed at least once a day and their housing should be carefully looked after for they are very susceptible to cold at this time. Place the specimen on the table and vigorously rub the coat in the direction in which it lies and persevere until

all the loose coat is removed, finishing off with briskly rubbing the specimen all over with a dry chamois skin. Belgian hares need a little attention to the fore legs when moulting its young coat. It should be held firmly by the ears and the other hand should be used to pull the legs one at a time, allowing the hand to slip so that all the loose fur may be removed. Under no consideration resort to plucking for this is altogether outside the province of grooming and can at once be detected by any competent judge and the specimen would be disqualified. Specimens thus handled have the advantage of not only being well groomed but at the same time, well trained and this is absolutely necessary for success in the show room. There is nothing more trying to a judge than to have a wild, restless, untrained specimen to handle, and in many instances specimens have gone down that if properly handled before the Show, would have been easy winners.

A Few Short Rules that Would be Well to Follow, Are:--

1. Select specimens of perfect health.
2. Select them as near perfection mark as possible.
3. Feed them the very best of nourishing feeds.
4. See that their hutches are sanitarily clean.
5. Keep everlastingly grooming them.
6. Break them to hand so that they will be perfectly tame and pose correctly in the Show Room.
7. Ship in baskets or boxes that are large and well littered and that will insure their arrival in good condition.

It is rather difficult to take up the different varieties and give the data necessary for the development and conditioning and selection so as to produce ones fit to win the Blue. There are too many opinions to consider, there are too many minor points to be covered and there are too many differences which brings success to many, that must be learned by close application and to careful study of condition and grooming. We have, however, covered some of these in our feeble way with the hope that it may be helpful to you.

New Zealand Red Hares

This is one of the latest varieties of rabbits to claim the attention of American breeders. It is bred in New Zealand largely for its size and splendid meat quality. In size they are between the Belgian and Flemish and claim is made that the quality of the meat is superior to either and commands better prices for hotel trade and in the open market. They resemble the Belgian in shape. In color they are a deep orange. This combination will appeal to breeders from a beauty standpoint also.

Standard of Points

The following Standard has been adopted by the New Zealand Red Hare Club of America:—

	Points
COLOR:—(Rich even deep orange, red in all sections.) Richest specimen to receive reward	25
SHAPE:—Body long, medium deep, back slightly arched, loins well rounded, muscular chest, head of good length, tail straight and a good racy appearance throughout	20
EARS:—About six inches, fairly thin, stout and heavy at base, no lacing on edge, one blend of color thorughout, color the same inside and out	15
EYES:—Large, round, hazel color, bold in appearance	10
FOREFEET:—Straight, medium, and rather long, slender. Hindfeet long, well colored, to correspond with body	10
CONDITION:—Medium fat, flesh set on firm, and a good racy appearance, fur of good quality	10
Without dewlap	05
SIZE:—Nine pounds	05
	100

DISQUALIFICATIONS:—Lopped or fallen ears or ear. Wry tail extending more than twenty-five degrees.

Standard of the New Zealand Rabbit

As adopted by the Pacific Pet Stock Association, May 10, 1914. Larger than the Belgian Hare and of a beautiful reddish buff color. Does to have Dewlap evenly carried. Everybody's friend wherever known.

Official weight, 4 lbs. at three months; 6 lbs. at five months; 8 lbs. at eight months; 10 lbs. at twelve months. Five points cut for every pound short.

Disqualifications—Wry tail, lop ear, crooked front or hind feet, other than hazel eyes, foreign colors.

SCORE	Points	Cuts
Color—Reddish buff, with whitish underbody,	30	½-10
Weight and size,	30	½-10
Head—Medium size and shapely,	15	½-7
Ears—Erect, medium thick, 5½ inches long,	15	½-7
Eyes—Hazel,	15	½-7
Legs—Medium, heavy-boned, with as little white as possible,	15	½-7
Condition—Firm in flesh and close coated,	10	½-5
	100	

We beg to acknowledge the assistance so kindly given us in the preparation of this book by Mr. Wm. I. Lyon, President of The National Pet Stock Association of America.

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